NEW ENGLAND FARMER

DEVOTED TO AGRICULTURE AND ITS KINDRED ARTS AND SCIENCES.

VOL. XII. BOSTON, APRIL, 1860. NO. 4.

NOURSE, EATON & TOLMAN, PROPRIETORS. OFFICE....34 MERCHANTS' ROW. SIMON BROWN. EDITOR. FRED'K HOLBROOK, HENRY F. FRENCH, } ASSOCIATE EDITORS.

A TALK ABOUT APRIL.

"Again rejoicing nature sees
Her robe assume its vernal hues,
Her leafy locks wave in the breeze,
All freshly steeped in morning dews."

APRIL, the fickle month, has been the source of a great many poetical images, and a great deal of moralizing. Life itself is said to be an "April day," but to our mind April seems like nothing so much as a sweet, capricious young damsel. You see, both begin their empire by *making fools of us*, and carry it on by alternate smiles and tears. At first, those tears bring a cloud to our own brows, but soon finding how shallow their source is, we harden our hearts, and laugh alike at smiles and tears, well knowing that the young thing will settle down into a sober matron at last.

How the first day of April came to be called "All Fools Day," is not definitely known, although two or three solutions are offered, but sufficient for us is it, that from time immemorial it has been as religiously observed as any other great day in the Calendar. On April Fool day, a man never knows when he is safe. Did you ever attempt to light a candle, and after ten or fifteen minutes unwearied exertions, find you had been blowing a parsnip? Is there a plate of particularly nice looking pancakes on the breakfast table? Don't be deluded into taking one, for like many other attractive shams, they are only stuffed with cotton. Does some fair lady, with a winning smile and courtesy, present you with a tempting slice of plum cake? "Stay thy rash hand," for you will find it seasoned with pepper, and sweetened with mustard. Shade of *Pandora*, what a conglomeration! You fare so poorly at home, that you think you will take a walk to the Post-Office by way of variety. You have been expecting an important business letter these three weeks—a letter which is to settle all your anxiety about a certain perplexing affair. Sure enough, there it is, an official looking document, precisely such as "fancy painted" it. You do not care, however, to have the bystanders see any unusual agitation on your countenance, so you step a little one side, and open your letter. It reads thus:—"Eh! you April Fool!" Amid a general laugh, in which you join, because it is the most dignified course left for you, you leave the office considerably crest-fallen. Having become a "sadder and a wiser man," you do not stoop to pick up the letter lying on the door-step, directed to yourself in a large, bold hand, but walk on, congratulating yourself that you are not caught this time. A little boy runs after you, calling out, "Mr., here's your letter." "Well, keep it," you ejaculate gruffly—another laugh from the office, and you discover that this was the "*true* bug," and the other the humbug." In short, that the whole thing was that hoax which is commonly called an "April Fool." Who has not been through just such a series of disasters, every year since he can remember, and alas! our children promise to be no wiser than ourselves. Man was made upright, but he has sought out many inventions.

Spring having fairly arrived now, the farming world begins its work in earnest. What a relief to both man and beast, to get out into the fresh air again. Everybody enjoys returning spring, notwithstanding its east winds, and mud, and storms, yet no one can look at it just as the farmer does. Now he returns to the pursuits which interest him most. With what exquisite pleasure

he turns up the fresh earth, plants his seed, and watches the little germ which is to appear on his table in the shape of corn, beans and potatoes, by-and-by. Others may enjoy the opening life of vegetation, but none can regard it with the same interest as he who claims ownership, and has the whole training in his own hands. It is all the difference between the parent of a fine family of boys, and the good neighbor who looks indulgently on, and thinks they are as well as could be expected of boys, but must be a deal of trouble.

Exclaimed one of the farming gentry from the limb of a tree which he was pruning—"Would I be President of the United States, when I can stay up on this tree!"

Such is the depravity of the human heart, that perhaps, if a deputation of his fellow-citizens had at that moment appeared, and invited him to come down from that tree, and go to Washington, he would have obeyed at the first summons, without waiting for grass or stones to "fetch him down," like the boy in the spelling-book; but this we will guarantee, that from his presidential chair, he would often look back with longing, to his former more humble elevation. It should require a strong sense of duty to his country, to call a Cincinnatus from his plow, or a Harrison from his log cabin. "Uneasy lies the head that wears a crown."

There is something in the "sweet influences" of Nature, and in the society of domestic animals, which love us without envy or malice, that is very soothing to one tired of the world's unceasing strife. To be sure, there is much that is hard, and some things not of a very elevating tendency in farm work; but hear what our good neighbor says: "I don't know but it is as dignified an employment to rub my pig's back for him, as to smooth the asperities of a restless politician; to teach my young steers to pull together, as to teach refractory 'Young America' to navigate the ship of State, without running her on to rocks. There are my bees," he says, "they will sting sometimes, but not so cruelly as man's ingratitude."

There is certainly some truth in these remarks. Many young men are kept from becoming farmers, because it is not the way to become suddenly rich, or generally speaking, famous, but it is a sure way to secure peace of mind, which is, at least, worth considering.

As to the *nobility* of the calling, Adam was its founder, and we can't go much farther back than that. To be sure, at that early period of the world's history, the choice of profession was somewhat limited, so that some people may say, Adam hardly had a chance to indicate his own feelings on the subject, but if this was the only calling offered him, it would seem to be the *design* that he should pursue it. The first lawyer was undoubtedly in the garden. This we shall have to admit, for with what skill at "special pleading," he presented the "case" to Eve, and won it too, sad to relate. We all know what an extensive practice he has had ever since.

Although many turn from the business of farming as not affording sufficient scope for ambition, or because they think it does not *pay* well, yet most men look to its pleasant retirement, as the hope and dream of old age.

"Give fools their gold, and knaves their power,
Let fortune's bubbles rise and fall;
Who sows a field, or trains a flower,
Or plants a tree, is more than all."

AGRICULTURAL EDUCATION.

The Massachusetts Society for the Promotion of Agriculture has in press, under the direction of its accomplished Secretary, Richard S. Fay, Esq., a new volume of its Transactions. It will contain, among other useful matter, an essay upon Agricultural Education, by Judge French, from advance sheets of which we give below some extracts. The writer advocates the establishment of a *School of Agriculture*, in each of our counties. Coming at a time when this subject is attracting much attention, we are sure our readers will be interested in the proposed plan, whether they concur in all its details or not.

"*Secondly*,—What is to be Taught?

To this question we may reply, in general terms, that we desire to teach the future farmers of the State how to increase their crops, without impairing the fertility of their soil, and how, at the same time, to cultivate to their fullest capacity their farms, their intellects, and their hearts, not neglecting their physical powers. There are higher aims in life than to raise corn, or to spin cotton, or to make money. A perfect system of education should have regard to the full development of all our powers. The education of the farmer should give him strength of body, vigor and manliness of soul, with refinement and taste to appreciate what is noble, and love what is lovely, as well as skill in the cultivation of his fields, and knowledge of the points of his cattle. To understand clearly what we want, we must first know what we possess, and then, looking abroad for standards of comparison, we may form some estimate of our possible attainments.

STATISTICS.

A glance at a few statistics will show us what, practically, we are doing in the production of the principal crops, and at the same time indicate whether improvement is demanded and is possible.

We give below, the average product per acre of the leading crops in Massachusetts, and in the whole United States, for the year 1849, as given in the Compendium of the United States Census of 1850, at page 178; also the average product of Massachusetts, for 1855, as given by the Board of Agriculture, in the report of their Secretary.

The correspondence of the two returns for Massachusetts, the one being made under the author-

ity of the United States, and the other under that of the State, for different years, is such as to confirm the accuracy of both. The difference in the average product of corn in the two returns is but 3-13 of a bushel, in the product of rye 8-14 of a bushel, in that of barley but one bushel. The disease of the potato accounts for the discrepancy in the returns of that crop.

We give, also, the average product per acre of the same crops in Scotland, for the year 1856, from returns deemed perfectly reliable, and the average product of three years, at the Albert Model Farm, in Ireland.

Table of Average Products per acre, in Massachusetts, in Scotland, and at the Albert Institution, in Ireland.

	Corn.	Wheat.	Rye.	Barley.	Oats.	Potatoes.	Turnips.
By Census of 1850, average product in Mass., per acre—bushels, . .	31	16	13	21	26	170	
By Report of Board of Agriculture, 1855, average product in Mass., .	28¼	15 10/13	12 6/13	20	21¼	93¾	231
By Census of 1850, average product in all the United States, as stated in Report of Secretary of State, for 1856, ...	19 1/16	9¼	11¼	17⅛	19¼	65¼	
Average product in all Scotland, 1856, ...	None.	29¼	24¼	34¼	36¼	102	694
Average product, Albert Institution, Ireland, 1853 to 1855, ...	—	32⅝	—	39¼	70	373	747

We have here the astonishing facts, that the average product of all the land in Scotland, for the years given, is in wheat, more than *three times* the average of the United States; nearly double that of Massachusetts; and more than double that of some of the great wheat-growing States,—the averages in New York, Ohio, and Indiana, being 12 bushels; in Illinois and Missouri, 11; in Iowa, 14; in Pennsylvania and Texas, 15; in Virginia but 5 bushels."

* * * * *

"It is felt and acknowledged everywhere in this country, that the College fits no one for the actual duties of any profession, art, or business of life. It does not profess to do so, but merely to give a training preparatory to the special education for some peculiar business.

For those who have wealth and leisure for the fullest education in literature, in art, and in science, whether they design to devote their lives to some regular profession or business, or to lead lives of elegant leisure, or to take their chances in the mazes of political life, a college course at Cambridge, doubtless offers unsurpassed advantages. But at the best, the number who can avail themselves of the benefits of college life, is but a very small fraction of the young men of the State. The vast majority are compelled to be content with a course of study less expensive of time and of money. This must, from the nature of our republican institutions, continue always to be the case. The three or four collegiate institutions of the State are all that are demanded for the training of such as are in a position to ask for this peculiar course of instruction. Indeed, the number included in our college classes more than represents the fraction of our own youth who avail themselves of a collegiate course, for other States contribute largely to swell this number. How idle is it, then, to point to our Colleges as the means of the general education of our youth. They do not profess to train their pupils for the actual business of life; and their classes do not, in fact, and as at present arranged, never can, include more than a small fraction of our young men.

If, again, we look at our Academies, we shall find in their classes, it is true, a greater number of our youth; for many are able to devote a year or two to an academical course, who have not the means, if they have the inclination, to enter upon a college life. But here, again, we meet the same objection, that the academical course of study is not in the line of training for the actual business of life, but rather a system of preparatory training for the colleges. It is understood that the course of studies at our best academies is especially adapted to prepare young men to enter college, and is not designed as a course complete in itself. The three or four years at the academy are therefore devoted almost exclusively to the study of the dead languages and mathematics."

SMOKING IN JAPAN.

There is probably no people who indulge so unremittingly in the practice of smoking as the Japanese, not even the people of Holland and Germany. The Japanese indulge the habit even in their sleeping hours. The fibre of the Japanese tobacco is extremely fine, somewhat resembling hemp, and its aroma is mild. It is smoked altogether in metallic pipes, clay never entering into the composition of a Japanese "dudeen." The wealthy use pipes of gold and silver, elaborately engraved, while the poorer classes content themselves with brass and iron pipes. The bowl of a Japanese pipe is smaller than a lady's thimble, and the quantity of the weed consumed diminutive in comparison with the contents of the huge meerchaums, chibouks and narghilehs of the Orientals. The tobacco is rolled into pellets, about the size of peas, and one of these gratifies, for the time being, the desire of the smoker, who inhales the smoke into his lungs, then puffs it off through his nose, literally converting the nasal appendage into a funnel. Attached to the pipe is a pouch made of paper, in which the Japanese carries his tobacco. His pipe is his constant companion, assuaging his pains, dispelling his gloom, soothing him in his irritability, and lulling him to repose when weary. He smokes day and night, before and after meals, always within doors, awaking at intervals during the night, lighting his pipe with coals from a brazier kept always full and burning, puffing a few whiffs, then dozing again. He never lights the same tobacco twice, but empties his pipe and fills it at every indulgence.

LEGISLATIVE AGRICULTURAL MEETING.

[Reported for the New-England Farmer by Thos. Bradley.]

The fifth meeting of the present series of the Legislative Agricultural Society was held on Monday evening in the Representatives' Hall at the State House, and a good audience, among which were many ladies, was in attendance.

The meeting was called to order by Hon. H. Nash, of Williamsburg, who introduced Richard S. Fay, Esq., of Lynn, as Chairman of the evening.

Mr. Fay on taking the chair announced the subject for discussion, "*Agricultural Education.*" He said that at a previous meeting when the question "how to make farming pleasant and profitable," had been discussed, he had stated many of his views on the present subject, and his remarks would necessarily be somewhat of a statistical character now. He stated that education must be considered not incidentally, but in its capacity in improving agriculture—not in the common idea, but the best method in which it should be furnished.

Before we get the true estimate of its importance we must consider agriculture itself; it must be socially and politically considered, although, said the speaker, it is almost ridiculous to speak of it in this light, as it is so patent to all. We read of its importance every day, and yet there is no act—no action. It is the most important matter, not alone in this State and country, but in the whole world.

Agriculture, said he, is the instrument that sustains mankind; it feeds them—it clothes them; and it is that upon which the civil and political existence of the world depends.

Mr. Fay said it was his confirmed opinion that agriculture was underrated by those who were employed in it; and he alluded to what Mr. Webster said in relation to it, on his return from England, when addressing an agricultural meeting in that hall: "That there was no man in England so high as to be independent of that great interest; and no man so low as not to be affected by its decline," &c. If, said Mr. Fay, agriculture is so important, the means by which it can be made more so are certainly well worthy of consideration, and in doing this it might be necessary to inquire what is done abroad and see if we are not behind in our system.

The speaker then said that by the State census of 1855, or the United States census of 1850, the average production of corn in Massachusetts was less than 30 bushels to the acre; but if the returns of corn exhibited at the fairs of the agicultural societies was averaged, it showed 80 bushels to the acre. He then spoke of the production of wheat here and in Scotland, saying that, by these returns, the average production of wheat in this State is 16 bushels to the acre, and that of the whole United States more than six bushels less, while in Scotland, with a climate and soil much less favorable to a large yield, and many other disadvantages, the average product per acre was 29½ bushels. While the average product of the United States was only 9⅝ bushels per acre, that exhibited at the agricultural exhibitions in Massachusetts showed a yield of 33 bushels. The latter showing what *can* be done, and the former showing what *is* done. The speaker contended that the reason, and the only reason, why we do not equal the product of Scotland is that we do not understand our business—we need education and enthusiasm, and he contended that the same want of education in any other pursuit would be comparatively ruinous.

He then spoke of the Albert Model Farm School in Ireland, as an institution where science and education were brought to bear, and as a partial refutation of the ridicule with which some men speak of book-farming. He said this school had been commenced as a means of developing the agricultural advantages of the country, and to show the success of it, he gave statistics of the returns, both of this Institution, Massachusetts, the United States and Scotland, from a work now in press, the author of which is Mr. Henry F. French.

Of rye, in 1850, the average yield in Massachusetts, was 13 bushels, in Scotland, 24½, at the Albert School, 35.

Of barley, the average yield in Massachusetts, was 21 bushels, in the United States, 17, in Scotland, 34½, and at the Albert School, 39¼.

Of oats, a crop, said he, on which we pride ourselves in Massachusetts, 26 bushels, (and in 1855 only 21½,) in the United States 19¼, in Scotland, 36½, and at the Albert School, *seventy* bushels.

This, he thought, showed that our trouble lay in the want of education.

Mr. Fay then spoke of root crops, and said there was no country in the world where more attention was given to these than in Great Britain; as there farmers understand that the root crop makes the grain crop, and from his turnip crop a man estimates his income from his grain. As another instance of our want of knowledge of root crops, Mr. Fay said that while the turnip crop of Massachusetts only averaged 231 bushels to the acre, that of Scotland was 694, and that of the Albert School, 747. The speaker then alluded to the hay crop of Massachusetts, which he estimated to be worth $20,000,000 per annum, saying that we could produce five times as much without decreasing the value of the article, and that in five years the product of the land, by education of the farmer, might be doubled, and then asked whether this was not a matter worth con-

sidering. If, said he, we can introduce agricultural education into our common schools, and so add $20,000,000 worth of taxable property to our State, this would be a capital investment, and at the same time would make our country look glad instead of sorry—our fields smile instead of weep.

How shall this be done? he asked. Many advocate the establishment of an Agricultural College, farmers' clubs, agricultural exhibitions, the distribution of tracts, &c. These, said he, may have their objects, but they are ephemeral, they do not meet the wants. We have to begin at the foundation to build up an enduring system as they have in Scotland; and Mr. Fay said he thought this could only be done by our common school system. We have educated heretofore in the wrong way, forgetting that seven-eighths of our people live by agriculture; we have been educating away from agriculture, and it is to our children's minds a drudge.

The Massachusetts Society tried the right method forty years ago, but we were a new country then, and if a farmer found one lot did not yield the crop he expected, he went to another lot, there being abundance of land; but now our land is impoverished and we have to take the stand that Scotland did twenty years ago, and by education in this direction bring agriculture to be considered a pleasure to our children. This must be done by changing the whole system of instruction, and teaching them agricultural chemistry, botany, and the kindred sciences.

The speaker urged the importance of this on the meeting, saying that he was so much the stronger an advocate in favor of it from the fact that he felt the loss of this education himself, and he alluded to the ease and thoroughness with which the young would learn when the tuition was early commenced.

He then introduced Mr. GEORGE B. EMERSON, as one who had for many years been engaged in the instruction of youth, and yet who had the interests of agriculture deeply at heart.

Mr. Emerson commenced by saying he thought there had been enormous mistakes made in the education of the agricultural part of the community; it was a fact that was ringing in every man's ears. He inquired what education was now given to benefit the farmer, as such, in our public schools, and contended that the education best adapted for the wants of the farmer would benefit every class of men. The speaker asked why our children should not be taught of what the air we breathe is made, and what it is made for, of what the water we drink is made, of what the earth we tread, and what the sunshine is, and what its uses.

The basis of all education, he contended, should be a knowledge of things, and if it were possible, he would place every child in the same position God placed our first parents, and let it know all about the surrounding objects. There is not a fact about science, said he, that is not easy to learn, and these should be taught by simple experiments, which impress themselves forcibly and indelibly on the minds of children, and it is only necessary to get teachers qualified to teach chemistry, botany, and the like, to have the pupils learn well. It requires less study to teach these than the branches which are now taught.

Every fact connected with the education necessary for a farmer, said the speaker, is more easy for a child to learn than anything else, and if this were not so, I should think God had made a mistake. A child longs for this learning, and to show this, he alluded to the inquiries they invariably made.

Mr. Emerson alluded, humorously, to a statement in the recent work of Darwin, that cats were necessary to the growth of clover, and followed the argument through, showing this curious instance of the dependence of one creature upon another. This, said he, is more difficult to understand than almost anything else. Every single fact that lies at the base of what a farmer should know, is easier to learn to the child than what he now has to learn, and these would be the best foundation for the very highest education, and he argued that all our ablest men have come from farms, where they have gained the strength to fill places in our government.

Senator EDDY, of Oxford, said he thought it would be a good thing to educate our children in the branches advocated by the last speaker, but the difficulty in getting teachers appeared to him insurmountable. He would rather put a child of his out in the family of a good farmer, whose mind was alive to the improvement of the age, than have him taught by any teacher in our schools, as by this means he would acquire a thorough and practical education, while his studies in school would only give him a superficial knowledge of farming. He said the much larger proportion of our teachers were females, and the majority of these would be afraid to go near a cow, much less being capable of teaching. He said he would rather see a child read a good agricultural newspaper than have him study the majority of text-books, and he thought that a young man would learn more by the establishment of farmers' clubs and agricultural libraries, and by the reading of good newspapers, than he would learn by sending him to an agricultural school.

Rev. Dr. STEBBINS was then called on. He regretted that his time was so brief, as he had desired to go thoroughly into the consideration of the subject, but he should confine himself to the general heads of what he proposed saying. This matter of agricultural education, said he, is what

we shall teach the scholars, as he took it for granted that a boy or girl could as soon learn the names of things as the abbreviations; it was easier to learn the component parts of a handful of soil than it was to analyze a sentence in Milton. And if teachers were so disposed, they would find it much easier and more profitable to teach their pupils the names of the birds flying over the school house than to teach them to enumerate billions.

The speaker said that the question was, what can be done practically? The Commonwealth are sustaining some 40 scholarships; put these boys in the scientific school, and in three years they can get into our high schools and teach our boys and girls; and this course the speaker said would be a much quicker method of teaching agriculture than our Legislature would take, he was sure. Then take our Normal schools, to the success of which he alluded in high terms, and instead of devoting so much time to the higher branches of mathematics, teach the pupils chemistry and botany in the fields. This can be done and should be done.

Alluding to ladies studying experiments in agriculture, he said that no lady need be ashamed to say she has tried such experiments, and it should be a matter of pride to her to say that she has done so. He closed by saying that it would be better, in our high schools, if, instead of spending so much time in the study of the higher branches, the scholars should learn the rudiments of farming.

Dr. GEORGE B. LORING, of Salem, said he was not certain that our farmers did not themselves possess the elements of agricultural education. He had thought, when listening to an argument before the Agricultural Committee a few days ago, that we should engraft into the minds of our children a respect for the profession of their fathers, and a love for farming. We don't, said he, want Boston to draw away the life-blood of the State, but we want to render farming, by education, so pleasant, as to induce Boston boys to engage in it.

Mr. Loring suggested the basis of a manual of agriculture for our schools, to state what agriculture is—how respectable, and important and useful—how to plant, to plow, and further, how to apply the science of agriculture in the district to be farmed; showing the different breeds of cattle, pasturage and other matters of practical use.

He said that he had found from conversation with farmers in different parts of the country, that they knew more about what they could produce than could be told them, and what was profitable in one place, was not so in another. He concluded by saying that he granted we wanted an agricultural college, and he had no objection to a county school, but he wanted the people to come and ask for these, before they were established.

It was announced that the discussion of the same subject would be continued at the next meeting.

For the New England Farmer.

THOUGHTS SUGGESTED BY JANUARY NUMBER OF N. E. FARMER.

Page 9—*Calendar for January.*—The example of the merchant and the man of business, who at this season of the year take an annual review of their transactions, take stock, foot up their books, and ascertain the results of the labors and speculations of the year, is in this article very appropriately placed before the farmer for his imitation. And it would surely be a satisfaction if farmers should more generally be at the pains to keep such debtor and creditor accounts with their several fields and crops as to be able to determine which of their crops, products and modes of management were yielding them the most remunerative returns. Then, too, besides the satisfaction there would be a positive and pecuniary advantage, for they would thus be able to decide what departments of their business yielded the largest returns, and thus obtain the best possible guidance for their future proceedings.

Farmers might, also, make a retrospect of the year from another point of view, contributing at once to their own advantage and to that of others. They might take a review of the year for the sake of deriving from it all the lessons and hints it might be capable of furnishing. Every farmer of an observing and reflecting turn of mind could derive lessons of value either to himself or others from the events of every year, for whether his labors and modes of management have resulted in failure or success, a valuable lesson for future guidance might be derived from these results, of whichever kind they might be. Those hints and lessons which might seem of little use to any but himself he might note down in a "Book of the Farm" for his own private use; while those which seemed likely to prove serviceable to some of his brethren, he might write out and give to the public through the columns of some agricultural paper.

Page 12—*Is Farming Profitable?*—Although Mr. Pinkham seems disposed to exaggerate somewhat in his pleadings on one side of this question, and thus to injure his argument, still it seems highly probable that the discussion of this question will eventuate in considerable good. One of the good results likely to come out of this discussion will consist in spreading abroad more generally a knowledge of the fact, which some merchants and consumers of farm products seem resolved to ignore or deny, that farming is not quite so profitable as many suppose, and that it yields smaller returns than most other kinds of business in which an equal amount of capital and labor is employed. Another good result may come of this discussion, if it should make more manifest to all concerned what are the chief reasons why farming proves profitable to some and not to to others.

Page 13—*John Chinaman as an Agriculturist.*—The practices adopted by our brethren in China furnish hints which many might avail themselves of with not a little advantage. For example, the soaking of seeds in some kind of fertilizing liquid, before sowing or planting, is not as common in this country as it might be. It secures usually an early start and a vigorous growth in the early stages of vegetation. Our favorite steeps are prepared by

dissolving saltpetre and sometimes hen manure in water. In these we soak garden and some field seeds for twelve, twenty-four, thirty-six or more hours, according to the readiness or slowness of any particular seed to germinate.

Page 15—*Care of Old Apple Trees.*—From an experience of methods resembling that recommended in this article, we are confident that wherever it is adopted it will renew the youth of many a seemingly useless tree.

Page 16—*A Carrot Crop.*—It is gratifying to see proofs every now and then that this crop is raised more extensively and successfully than heretofore; for we are convinced that each cow and horse on a farm might derive both comfort and increase of usefulness from the occasional use of this root—to the extent, say, or forty or fifty bushels each, during the fall and spring months.

Page 25—*The New Plow.*—The testimony of Mr. Colburne in favor of this plow will be satisfactory over a wide extent of country: for he is pretty extensively known, both to the East and the West, as a man of good judgment, character and reliability.

Page 24—*Lice on Apple Trees.*—Admirable advice.

Page 31—*Pumpkins for Cows.*—Observation at sundry times has confirmed me in the opinion that the seeds of pumpkins cause so much increased action in the kidneys as to effect a considerable decrease in the secretion of milk in cows. To many fowls pumpkin seeds are poisonous, and cause death.

Page 40—*Dadd on the Diseases of Cattle, &c.*—It would be well for man and beast, if every one would heed your remark, viz: "A proper care of stock will prevent most diseases; and when it has invaded the system, nature left to herself will ordinarily do more to effect a cure than all the nostrums of the shops." MORE ANON.

JAMINETTE PEARS.—The beautiful pears sent us by "*A Subscriber*, Salisbury, Mass.," are the *Jaminette*, so called because they were raised by M. Jaminette, of Metz, from the seed. It is an excellent winter pear, produces abundant and regular crops, and is well worthy of general cultivation. We have it growing in our grounds, and answering to those sent us, and the description given by Downing is as follows:—

"Fruit of medium or large size, varying in form, but mostly obovate, a good deal narrowed at the stalk. Skin, clear green, paler at maturity, considerably marked with russetty brown, especially near the stalk, and sparkled with numerous brown dots. Stalk scarcely an inch long, rather thick and obliquely planted, without any depression. Calyx open and firm, set in a basin of moderate depth. Flesh white, a little gritty near the core, but very juicy and melting with a sugary, aromatic flavor. Ripe in November and December.

Mr. E. MEHURAN, of Middletown, Vt., has a fat ox, six years old, which weighs 3000 pounds. He is of a bright red color, very short legged, and if he lives to grow up, will be a credit to his owner.

A FARMER'S BAROMETER.

The introduction of the subsoil and steam-plows, seed-sowers, seed-separators, new machines for mowing and reaping, the introduction of new plants and fruits, and the art of thorough drainage, are not to be in the future the only items of progress on the farm, or topics of discussion in the farmer's family. Another kind of investigation has already been introduced through the aid of measures, scales, books, the microscope and the *barometer.*

Whatever pleases, while it instructs the younger portions of the farmer's family, will greatly tend to attach them to the soil, and to supply that skill which has never yet been brought to bear upon our modes of farming. It will be long before the truth will be received into all minds, that *the atmosphere is the great store-house of supply* for our plants, and that a deeper and more reliable knowledge of its action is essential to a successful husbandry.

For several years past we have had a barometer hanging by the door, and have been pleased and instructed by its timely and valuable warnings. The recent examination of a new, simple, and yet effective instrument, has brought its importance to mind with a new freshness and interest, as our reflections have suggested the great value which it may prove to agriculture when it becomes common, and its teachings are properly regarded. The instrument to which we have alluded, and which is now before us, is the invention of a Mr. TIMBY, and while it is constructed upon strictly scientific principles, is also a beautiful ornament for the library or parlor, where its perpetual suggestions must have an important influence upon both mind and business. In reference to this particular barometer, the *Scientific American* "bespeaks for it a universal adoption, especially among agriculturists, as they, more than any other class save seamen, need the council of this faithful monitor, which leaves nothing to conjecture, but tells with promptness of the coming storm long before a threatening cloud is visible in the sky." Mr. TIMBY, as we learn, has not only introduced the first marked improvement in this instrument, but has so reduced the cost as to enable most persons to avail themselves of its advantages.

As great as the value of the barometer is acknowledged to be to the navigator, a little reflection and investigation will satisfy many that its common use will be of scarcely less importance to the tiller of the soil. Let us bring to our aid, for a moment, the omnipotence of figures, and see what revelations they will unfold. The United States Census of 1850 gives the valuation of the agricultural products of the country, (but only includ-

ing that portion of the crop which is easily damaged by getting wet while being harvested,) at more than *nine hundred and fifty millions of dollars!* It is supposed to be a fair estimate, by good judges, that there is an average loss of *five* per cent. on all the crops harvested in the country, because most crops that are injured by storms or by a succession of damp and cloudy days, are injured much more than five per cent., so that the average on the whole may be fairly set down at that sum. If the value of the barometer, in the hands of observing and intelligent farmers is not over-estimated by the most scientific men of this and other countries—such men as Dr. ARNOT, Prof. SILLIMAN, Dr. DICK, Prof. HENRY, Prof. MAURY, and others—it is fair to suppose that a large proportion of this loss might be prevented, and thus a gain made to the farming community of about *fifty millions of dollars* annually! Another item worthy of consideration is, the increased cost of harvesting a damaged crop. If by the general use of the barometer this could be prevented, another sum, of startling magnitude in the aggregate, might be saved.

The little, unpretending barometer, hanging in the saloon of one of our splendid ocean steamers, warns the watchful pilot of the approach of an impending iceberg, even amid the gloom of the darkest night! Why may not its admonitions be of equal value to as much property exposed to the elements on the land, and teach us to shun the losses which annually depreciate the profits of the farm?

For the New England Farmer.

WINTER BUTTER AGAIN.

MR. EDITOR:—To ascertain the best mode of making winter butter is of a good deal of importance, for there are many tons made in the State every winter. You must have patience with us, as we correspond with each other to find the best "*modus operandi*" of its manufacture. In the *Farmer* of January 28, your "South Danvers" correspondent, in allusion to my article, stating my method of butter-making in the winter, expresses surprise that any one who feels competent to instruct others in this matter, should think it necessary to use the juice of carrots to color it. Let "South Danvers" try it, and he will lose his surprise. He is not the only one that has been surprised in lessons of improvement. Worcester county is not behind any other, to say the least, in butter-making, and I know that some of the best dairy-women in this town and county use the carrot in butter some six or eight months in the year. Let me surprise "South Danvers" again by telling him that one of the best dairies in Princeton, and one that has taken more premiums within the last fifteen years than any other in Worcester county, and probably in the State, never makes a single pound of butter after September, till the next summer, without carrots. Yes, more high premiums have been given to WILX ROPER, of Princeton, (and justly awarded, too, I do not,) at county shows in Worcester and Barre than to any man in the county, and those premiums were awarded by the best judges of butter that could be selected. Further, Mr. Roper took the first premium at the State show (in 1858, I think,) on tub butter, and would have taken the first also on lump butter* had the laws of the society permitted both to be given to the same dairy. Mr. Roper has often told me that he never makes butter in fall or winter without carrots. I know it will surprise "South Danvers" greatly to know that the best premium butter in Worcester county, or the old Bay State, is colored with carrot juice. But it is a fact, and facts are stubborn things.

Let "South Danvers," or any one else that doubts this improvement, try it, and he will be surprised to find that his stock of wisdom, in making winter butter, may still be improved.

Yours still for improvement,

Princeton, Feb. 13, 1860. J. T. EVERETT.

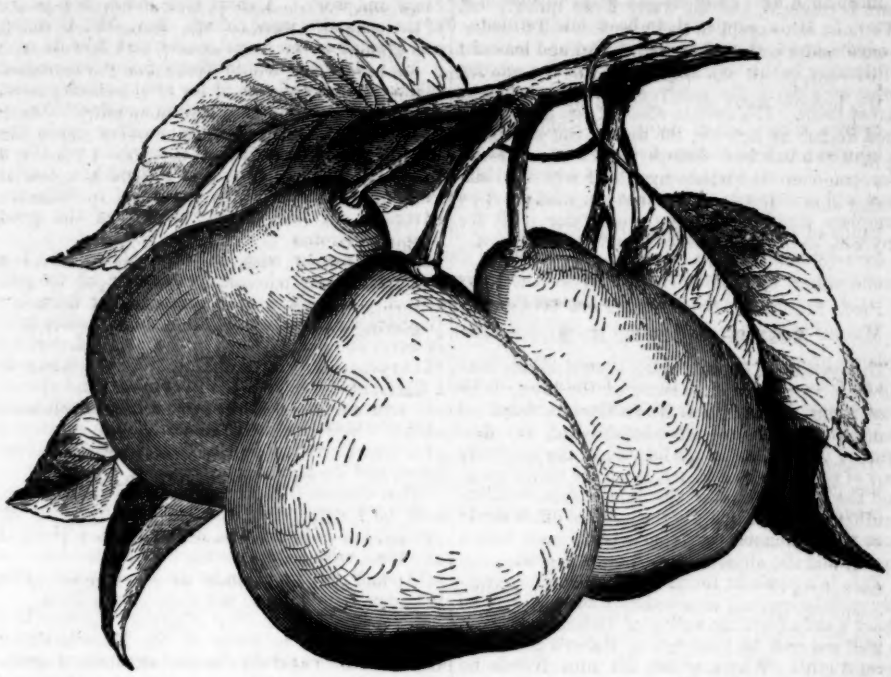
* The first State premium on lump butter was given to another dairy in Princeton by the same committee.

NEW PUBLICATIONS.

STATISTICAL AND HISTORICAL ACCOUNT OF THE COUNTY OF ADDISON, VT. Written at the request of the Historical Society of Middlebury. By Samuel Swift. Middlebury: A. H. Copeland. 1859. 1 vol., pp. 132.

The acknowledgment of the receipt of this work gives us an opportunity of calling attention to a section of country which we have long regarded as naturally the best agricultural portion of New England—we mean the Champlain valley, of which Addison County, Vermont, is, at least, a favorable specimen. The county extends from Lake Champlain into the Green Mountains. The soil of the eastern portion is generally loam of variable compactness, and some is rocky, gravelly, or sandy; on the streams alluvial; and on the lake are extensive flat lands, "composed of clay, with a mixture of vegetable substances, which were obviously once the bottom of the lake." When first cultivated, this section was as celebrated for the production of wheat, as it now is for its fat cattle, fast horses and fine sheep. Several years ago the editor of the Albany *Cultivator*, after visiting Addison county, said, "We have never seen any other land which is capable of sustaining as much stock to the acre." It is claimed by observing farmers there, that the finest imported sheep sensibly improve in this county, and that "there are better flocks in the county of Addison than in *any other part of the world.*"

Those of our readers, however, who have any particular interest in this county—and we think it would be well for many who are dreaming of prairie-land to share that interest—will wish to procure a copy of this well written and full statistical and historical account, to a single feature of which we have alluded. The publisher will forward a copy by mail, pre-paid, on receipt of the price—fifty cents.



BEURRE KENNES PEAR.

The Beurre Kennes is a fine new Belgian variety, described and figured in the third volume of the *Annales de Pomologie.*

Size, medium. *Form*, pyriform, inclining to turbinate, some specimens flattened at the poles. *Calyx*, sunk in a moderately deep cavity. *Stem*, about one inch in length, planted on the apex, sometimes in a fleshy ring or protuberance. *Color*, brownish green, colored with a thin gauze-like covering of russet, stippled with red and gray dots; at maturity yellowish, suffused with a mixture of brown and crimson on the sunny side. *Flesh*, yellowish-white, melting and juicy. *Flavor*, sweet, rich, with a very agreeable aroma. *Season*, October to November. *Quality*, "best." The tree succeeds well on the quince stock, bearing regular and abundant crops, but has not yet been proved on the pear stock. The fruit is borne in clusters, and adheres strongly during the gales of autumn.

About Corn.—What becomes of the corn crop? According to the last census, the corn crop of the United States, in the aggregate, amounted to about 600,000,000 bushels annually. How and in what manner is such a vast amount of grain consumed profitably for the producer? Of the crop of 1850, about 4,500,000 bushels were exported, and more than 11,000,000 bushels were consumed in the manufacture of spirituous liquors. The balance was used at home, as food for man and beast. Since that time, the amount consumed in the manufacture of alcohol and high wines must have largely increased to keep pace with the growing demand for alcohol in the manufacture of burning fluid.—*Prairie Farmer.*

ADVANTAGES OF A HEAVY SOIL.

A clay soil well under-drained, is undoubtedly the most perfect soil in existence. I have heard cultivators say they did not want a soil that needed any artificial drainage; in other words they desired one so light and porous that water could not be long retained by it. Long experience has led me to a very different conclusion. A porous soil will not retain manure long enough to become as fertile as I wish, and the cost of frequent manurings which it must receive, if I get large crops, is not a small item. On the other hand, a heavy or strong loam will hold for a great while all it gets. But unless a heavy soil has a porous subsoil, which is very rare, it will not allow the water to drain off so readily as good farming requires—passing, as

it must, during this drainage, across the whole breadth of a large sloping field. But every disadvantage is removed if we tile drain it—the manure is retained, and the water flows quickly off. We must not expect to find a perfect soil to order. I once asked one of the most skilful and eminent cultivators in this country, what was the relative value of a decidedly sandy soil, and a strong or clayey loam. His answer was, "If you give a hundred dollars an acre for the sandy, you can afford to give two hundred dollars for the strong loam. For you can do whatever you like with it. Manure will enrich it to any extent you wish; and by complete tile-drainage, you can render it fit for any use."—*Correspondence Country Gentleman.*

For the New England Farmer.

NORTH GROTON, N. H.

This portion of Groton, though, territorially considered, very near the centre of the town, is by way of distinction called North Groton, from the fact that the first post-office established was designated Groton, although located in the southerly part of the town, and hence, when the public good, and the convenience of the inhabitants required another office, the name of the original office would have to be changed, or the new office must have a *prefix*, and the citizens agreed upon *North*.

This is a pleasant township; the surface generally undulating, not mountainous, after a rise of about a mile from the valley of Baker's river; it is well watered by branches of Baker's river and several other streams, which fall into Newfound lake, and one considerable pond. The soil is productive, and easily worked, and adapted to all the grains, roots, and most of the fruits of other portions of New England. The timber is mostly spruce, hemlock, sugar maple, beech, birch, some pine, &c.

The climate, of course, is somewhat variable, not so much so, however, as it is nearer the sea-coast, but judging from the health and longevity of the inhabitants, it is peculiarly healthy. Groton is in Grafton county, and is bounded, north-east by Rumney, south-east by Hebron, south-west by Orange, and north-west by Dorchester. It is 10 miles from Plymouth, half shire-town of Grafton county, 45 miles from Concord, 29 miles from Dartmouth College, 29 miles from Haverhill, the other half-shire, 90 miles from Portland, and 120 miles from Boston. It is true that this section of country is in a high degree of latitude, and the winters are longer than in more southern climes, but the disadvantage, if it be one, is more than compensated by the unrivalled purity of air and water.

The inhabitants are mostly independent and forehanded farmers and mechanics, and for moral and social virtues, and general intelligence, they stand deservedly high. Great interest is manifested in the cause of popular education. Indeed, according to the report of the New Hampshire Board of Education, the schools of this town occupy a very high position; they rank as high as the highest. A few days since the School Commissioner for Grafton county, Prof. PATTERSON, of Dartmouth College, visited the school at this place, and delivered an address at the church in the evening to an attentive and deeply interested audience. The occasion was one of much interest, parents and scholars participating. The people of this town, too, are alive and active in every good cause and work. A short time since, the pastor of the congregational church, Rev. Mr. CONANT, was greeted by his parishioners and friends with a visit, leaving behind them many substantial tokens of love and regard for him, as their pastor, and respect for him as a faithful and devoted minister. Subsequently a large number made the Rev. Mr. KENNE, a retired clergyman, who for a time has been suffering with ill-health, a similar visit. Sectarianism does not seem to influence adversely the benevolent "bump" of the good people of Groton.

In the former case, the Rev. Mr. Conant is a thorough going trinitarian orthodox of the old school. Yet not only brethren in that faith, but Baptists, Universalists, Methodists, &c., alike freely gave, and freely joined in the social festivities of the occasion. In the latter, Rev. Mr. Kenne is a Calvinistic Baptist; but his visitors and almoners represented all of the persuasions enumerated above. Now this seems to me to be an exhibition of a true Christian spirit, disinterested benevolence, and the right sort of charity.

That Groton is thoroughly a cold-water place, may be learned from the fact that there is no agency, nor public house, nor store, nor place of any kind, where intoxicating liquors are kept or sold; and only one man in the whole town, who is known habitually to use them in any form.

Knowing that the *New England Farmer* is a welcome visitor to many of the households of Groton, I have said thus much, intending, if agreeable to your *corps editorial*, to keep you posted in reference to matters of interest in this locality.

North Groton, N. H., 1860. B.

RAISING PORK.—At a discussion by members of the Ohio Agricultural Society, Mr. Taggard, of Wayne, said:

I keep a sleeping and dining-room for my hogs, warm and clean. Thus I save one-third of the feed. Don't crowd my hogs with feed. Get corn meal and scald. Have such hogs as mature early. Keep them till May, and ring them and turn them into the clover field. Give them a little corn.—Leave them there until the first of September, just when the corn begins to harden. Cut up corn and throw to them three times a day; more value in your corn and stalk then than afterwards. One bushel of corn in September will fatten more than one and a half bushels in December. A hog will pay for good keeping as well as a horse or ox. Kill November 15th. Don't like Suffolks.

MR. GREGORY'S ADDRESS.—We have received a copy of the Address before the Essex Agricultural Society for 1859, by James J. H. Gregory. Starting with the axiom that "for every effect there is a cause," the speaker, by forcible and well-stated considerations and illustrations, draws attention to the importance of correct observation and exact experiments to the farmer, with reference to the elevation of his nature and the improvement of his calling.

For the New England Farmer.

TURNIPS---THEIR VALUE IN FEEDING STOCK.

MR. EDITOR:—Believing fully that the value of the common flat turnip is by many under-estimated, I wish to give you a fact or two in regard to their use in the fattening of cows. Five or six years ago, having about a thousand bushels of turnips to dispose of, it occurred to me to purchase a few cattle to stall-feed for beef. Among others, there was one small cow, very old and quite poor. She ate the turnips freely, throve well, and in due time was turned off to the butcher and slaughtered. We took a quarter of the beef, and during the time it lasted, the remark was frequently made by one and another of the family that it was the juciest, the richest, the best flavored beef we ever had bought of the butcher who usually supplies us. This opinion we have remembered, without feeling confident that the turnip feed had any particular connection with the quality of the meat. But within a few weeks past, I have sent another cow, (a young one) to the butcher, that was fed and fattened on turnips and *meadow hay*, having had no grain of any sort till the last fortnight of her life, when the turnips were discontinued and four quarts of meal a day and English hay were substituted, that the turnip flavor might have time to pass away from the meat. Being well supplied with meat at the time, we took none of this; but have the testimony of a neighbor and friend, whose family were supplied with some of it, that it was of superior quality.

Now it must not be understood from this, that I fully and unhesitatingly believe that turnips will always make beef of extra quality, but my faith is so strong, that I shall not fear to make another trial when circumstances are favorable; and I should not hesitate to recommend the turnip as a cheap and valuable feed for the production of flesh or milk. In feeding to milch cows, of course the quantity should not be large, or the flavor of the milk will be affected. But to a fattening animal, after she has become so accustomed to them that they will not unduly scour her, a bushel and a half a day, if she will eat so many, will not injure her. But it should not be forgotten that the turnips must be discontinued for at least ten or twelve days before she is slaughtered, or the meat will have an unpleasant taste of the turnip.

I was about to stop here, but it occurred to me that my friend, J. P. B., (who likes to laugh at his neighbors sometimes, when they make a blunder or a bad bargain,) might ask why I did not tell about my experience in fattening a pair of *steers* on turnips. So for fear that he will tell the story, with embellishments, I will give it here. At the time before mentioned, when I had such a heap of turnips to feed out, I bought, among other animals, a pair of steers, for which I gave seventy dollars. I made my estimate what they would weigh at the time of the purchase, and what they would gain as the result of eating one or two hundred bushels of turnips, with hay and grain added; with the probable rise in the price of beef before they would be sent to the shambles. Well, the result was of course quite satisfactory. A very respectable profit was to be made on these steers. But, Mr. Editor, did you ever make calculations that were not realized? I have, and this was one of them. The steers were placed in the barn, and the turnips laid before them. They put their noses down, smelt of the nice sweet turnips, then looked at me and said, "Humph! have you nothing better than this for us?" "O," said I, "you are not used to turnips—you don't know what is good." I left them for a time, thinking they would by-and-by taste, and so find out that turnips were good for steers. But they did not taste, and so I found I must try them with something else. So I offered them some Indian meal, but with the same result, they smelt and left it. I thought that by keeping them hungry for a few days they might be brought to eat turnips; so they were fed for a week or two lightly with hay, turnips being frequently offered; and after a while, they consented to a compromise, and agreed to eat a few of the turnips if I would give them a plenty of good hay. But they never seemed to like them. And meal they would *not* eat. So you will not be surprised at the result. When they were sold I received, after feeding them some three or four months, about *two dollars less* than I gave for them. Is farming profitable? M. P.

Concord, Feb. 14, 1860.

For the New England Farmer.

AGRICULTURE AT YALE.

LETTER FROM JUDGE FRENCH.

MY DEAR MR. BROWN:—Boston is a great city, but New York is so much greater, that here, within two or three hours of her, our modern Athens seems not to be much considered. Here I have been for three days, and not a Boston paper can I find in either of the hotels, while the New York dailies load the tables. Possibly the secret of this may be guessed, when it is known that the *Tribune* and *Times* have their reporters here, carefully reporting the interesting proceedings of the month, while no Boston publisher seems to think it worth his trouble to notice the movement.

The *Farmer* has already published the plan of the Agricultural course of lectures now in progress here. Professor Porter, of the Scientific School, is the prime mover of the scheme, which, in brief, is a course of about seventy lectures upon Agriculture, given three or four a day, at convenient hours, all at one place, so that any person may attend the whole. Tickets to the number of about one hundred and fifty, at ten dollars each, were disposed of, mostly to young farmers, scattered through New England, New York, and many other States. Most of these attend regularly the whole course; and many others come in for a week or more to attend the discussions upon subjects which particularly interest them. The first week was devoted mainly to *Agricultural Chemistry, Entomology, Vegetable Physiology* and *Meteorology*, and the lectures were given by Profs. JOHNSON and SILLIMAN, of Yale College, and by Dr. FITCH and D. C. EATON, Esq. Col. WILDER,

on the second week, led off on the subject of *Fruits*, in his usual happy manner, followed by Dr. GRANT, upon the *Grape*, Mr. PARDEE, upon *Berries*, Mr. BARRY, upon *Fruit Trees*, Mr. ALLEN, upon *Fruits*, and Mr. G. B. EMERSON, upon *Trees*.

It is doubtful whether the world can produce another set of men so well qualified to instruct a New England audience upon these subjects as those who lectured during the last week. This, the third week, has been devoted to Agriculture proper. LUTHER H. TUCKER, of the *Country Gentleman*, is lecturing upon *English Agriculture*. Your humble servant is presenting the subject of *Drainage*. Prof. BREWER talks of *Tobacco* and *Hops*, JOHN STANTON GOULD, of *Grasses*, T. S. GOLD, of Conn., of *Root Crops*, LEVI BARTLETT, of New Hampshire, of *Sandy Soils*, JOSEPH HARRIS, of *Cereals*, Dr. PUGH, of *German Agriculture*, and Prof. PORTER, of *Agricultural Statistics and Education*. An eloquent lecture by Hon. JOSIAH QUINCY, Jr., on Wednesday evening, was received with bursts of applause.

The fourth week will be opened by CASSIUS M. CLAY, of Kentucky, on *Cattle*, and Messrs. ALLEN, of New York, FLINT and HOWARD, of Boston, upon the *Dairy* and *Horses*, Dr. GULLIVER, upon *Horses*, Mr. GOLD, upon *Sheep*, Mr. COMSTOCK, upon the *Breeding of Fish*, and Mr. WELD, on *Agricultural Associations*.

DONALD G. MITCHELL, known as Ik Marvel, the author of some of the most charming books in our literature, "The Reveries of a Bachelor" among others, is to deliver the closing lecture on *Rural Economy*. His bachelor reveries have been disturbed by the acquisition of a small family, and he is now much interested in agricultural pursuits.

The lectures are designed to be of a practical nature, and to be given in a familiar way. After each lecture, any person in the audience puts such questions as he pleases, and hours are assigned for familiar discussions of such subjects as the class may select.

This movement of Prof. Porter is worthy of all praise. It is a progressive measure, I think entirely novel in this country, designed to be followed up in succeeding years, with such modifications as may be thought best. A large and convenient building for the use of the Scientific School is now in progress, and the lecturers of next year will have the advantage of a Museum of Natural History to aid their illustrations.

Besides the lectures, New Haven has great attractions. Its society, in culture and true refinement, cannot, perhaps, be excelled in this country. The old college buildings and the public grounds planted with magnificent elms, in somewhat mathematical order, tell of the severe taste of the olden times, while the elegant and classic modern dwellings, with their tasteful surroundings of evergreens dotting the broad lawns which are gracefully traversed by winding walks and drives, give evidence of affluence and the dignity of leisure from pressing worldly care. During the lectures, the duties of hospitality are not forgotten, and they who have gone to New Haven to study agriculture, have received those social attentions so grateful always to strangers in a strange land.

I regret that arrangements were not made for daily reports of the lectures in the Boston papers. A full proportion of the teachers if not of the taught, are from among those who read the Boston dailies, and the good effects of the movement might have been more widely diffused, had proper attention been given to this matter.

A similar course of instruction might easily be organized in Cambridge or Boston, or many more persons in future be induced to attend the lectures at Yale. The wide diffusion of knowledge among farmers, a class not reached by the ordinary means, through such an agency as this, can hardly be estimated. Every pupil becomes as it were a missionary to convey the new ideas thus acquired to his friends and neighbors, and a new impetus is given to the great cause of Agriculture.

New Haven, Conn., Feb. 16, 1860.

For the New England Farmer.

WORMS IN APPLES.

MR. EDITOR:—There is much complaint in this vicinity respecting a new (?) species of insects which have, by their secret depredations, rendered nearly worthless certain kinds of apples.

The insect, while in the apple, is a very minute worm or grub, scarcely larger than a pin, white in color, and rather more than an eighth of an inch in length. This is its full size; but when its operations within the apple first commence, it is so small that it is not easily seen with the naked eye. Its journeys in the apple are short at first, but they gradually increase in length until the whole interior is perforated through and through with hundreds of its little pin-holes, while upon its surface the apple looks as round as ever. Sometimes I have taken up what I supposed to be a sound apple, and it would crumble to pieces in my fingers; and I would find that several of these little pests had got the start of me and devoured or demolished nearly the whole of the apple except the skin!

So far as I have observed, personally, it seems to prefer sweetings, russets, and some common kinds for which I have no name; but its ravages are also extended to several other varieties.

They commence the work of destruction early in the fall, and carry it on to midwinter, certainly, and whether it reaches beyond this period or not, I am, at present, unable to decide.

While looking over some russets the other day, which had been very thickly inhabited with these

early settlers, I observed many very small bugs slowly crawling upon the inner sides of the barrel. They were of a dark chestnut color, and about an eighth of an inch in length. The thought occurred to me that perhaps these were the little grubs in their perfect form; but if so, where and when did they go into the pupa state, and how long did they remain in it? Several of the apples in which the grubs had been at work were examined and no worms could be found.

There is no mention made of this insect in Cole's American Fruit Book, nor in any work on Entomology which I have at hand, so I have ventured to inquire, through the columns of the *Farmer*, for information of any kind concerning this little marauder, the destructive habits of which threaten, at least in this region, to be a formidable barrier to the most important branch of fruit-raising.

In reading the report of the third meeting of the present series of the Legislative Agricultural Society, I saw that the question was asked, "What should be done to prevent so many of our apples becoming so wormy;" and the statement made, "that nearly three-fourths of the crop in Worcester county had been spoiled the past season by this trouble," but no description was given of the worm, or any of its habits. It would be interesting to know if it is identical with the insect I have partially described. S. L. WHITE.

Groton, Feb. 7, 1860.

For the New England Farmer.

CULTURE OF PINE TREES.

DEAR SIR:—In accordance with my promise made to you, I will now give you some account of the "Culture of Pines" on our Island. I think it was in the spring of 1846 that Mr. JOSIAH STURGIS, (now of California,) planted a lot of five acres, after taking off a crop of corn the year previous, with the seed of the common hard pine of Cape Cod. The seeds were put in with a common seed planter, in rows about six feet apart, and came up in the rows from one to four feet apart. Two years afterwards he planted five acres more adjoining, sowing broadcast, and harrowing in a mixture of the hard pine seed with that of the "*Pinus Montimo*," of France, both of which came up well and grew finely, In 1851, Mr. Sturgis called on me to look at them, and also proposed to me to buy several hundred acres of land in company with him, and plant it. I found his trees looking healthy and vigorous; some of those of the first planting were five feet high, and about five inches thick near the ground. We purchased about four hundred acres of light sandy land, for about two dollars per acre, and expended about one thousand dollars in procuring seed from Barnstable county, and in the spring of 1852, planted the whole tract, using a planter with a sharp cutter to cut the sward, and a common cast iron broad harrow or cultivator tooth following, and the seed dropped behind. This method planted the seed too deeply, but enough came up, had they not been killed by a severe drought, and by the ground moles which ran along the rows, leaving a hollow space beneath the young trees. The following year we put in three spike harrow teeth, which just scarified the surface, and the trees came up abundantly, and neither drought nor moles disturbed them, and now the largest of them are six feet high, and three to four inches thick near the ground. This last method of planting is not the best. I think the better way is to plow the ground and cultivate it one year, and then plant it with a common seed planter. Until 1852, the common and French pines had grown alike, but in this year, the French grew about twice as much as the others, and in some instances the centre spike grew three and a half feet in length and near an inch thick.

I now gave my whole attention to the *Pinus Montimo*, and imported over fifty bushels of seeds, and several hundred acres have been planted with them. In the fall of 1855, many of the first trees of the French kind, which were planted by Mr. Sturgis, were fifteen feet high, and six inches at the trunk, but the following winter when the thermometer stood for several days at or near 12° below zero, many of the finest trees were killed. Those of mine which were only a few inches high, and covered with snow, survived, and are now doing well.

The last tract which I planted was planted in summer, sowed to rye in the fall, and planted with the seed planter in the following spring with the *Pinus Montimo* seeds, and the trees are now growing well. The cost of the land was about two dollars per acre, the plowing three dollars, the seed rye one dollar, the pine seed two dollars, the planting one dollar, making nine dollars, and it produced twelve bushels of rye, which sold at one dollar per bushel; the straw was worth more than the cost of harvesting, thus making a profit, after allowing another dollar per acre for harrowing, of two dollars per acre, and the land all planted to pines, beside.

Many persons think our waste, barren lands can be used more profitably by stocking them with sheep, than in any other way, but let us make some figures and see what they will say, for they always tell the truth when properly used. An acre of land will cost about two dollars, and it will take about two acres of it to feed one sheep during the summer. It will cost about one and one-half dollars per acre to stock it with sheep, and about the same to plant it with pines, supposing the crop of rye only pays for its own cost. There is no doubt but the land will, in thirty years, produce twenty cords of wood per acre, which is now worth here, six dollars per cord, and deducting for cutting and carting two dollars per cord, will leave four dollars, which is equal to eighty dollars, for the thirty years, or two dollars and sixty-six and one-half cents per acre per annum, or three dollars grown to eighty-three in thirty years. If any sheep husbandman can make up the other side of the account to match this, I shall be pleased to hear from him. E. W. GARDNER.

Nantucket, Feb., 1860.

SOAKING SEED WHEAT.—Mr. Walter R. Neal, of Maysville, Ky., writes to the *Rural American*, that in the fall of 1858 he prepared 20 acres of land for wheat, and at the same time his brother, whose farm adjoined his, prepared ten acres. The land, seed and mode of preparation, and time of sowing, were the same. The only difference was,

he says, "my brother soaked his wheat before sowing, in strong brine, and then rolled in lime; while I sowed mine without either. Now mark the result. At threshing time my yield was 13½ bushels to the acre, which was about an average yield in the neighborhood, while my brother's averaged 22½ bushels to the acre. Still further, my wheat was damaged with the smut, while my brother's wheat was entirely from free smut and all foreign seeds."

EXTRACTS AND REPLIES.

LEGHORN FOWLS.

The inquiry of your correspondent for the best fowls for laying and for cold weather induces me to say that the Leghorns have done the best with me of any I have ever kept. The Black Spanish are good layers in warm weather; but these lay in warm or cold weather. They commence to lay when about four months old, and have continued without offering to set, till now, February 7; and although they have froze their combs, they have laid all the time. I have had but eight hens, and they have laid thirty dozen eggs since the last of November. They hatch well; and I have never lost one by disease. I consider them very hardy.

Foxboro', Feb., 1860. L. R. HEWINS.

REMARKS.—Our correspondent states that he has no Leghorn fowls to sell, excepting two or three roosters, but can furnish a few eggs. He will please inquire of nurserymen for the grape vine he wants.

—

ABOUT FEEDING BEES.

FRIEND BROWN:—I noticed in the last *Farmer*, a gentleman in Salisbury wants to know how he shall feed his bees. I will tell him how I feed my bees when they are short of honey. Go to some one who has taken up a swarm of bees, and get a few pounds of honey in the comb; that from an old swarm is the bet, because there is more bee-bread in an old swarm than a young swarm. Take about one pound of honey and comb and place it on a plate, put two little sticks under the honey, in the plate, so that the bees can go under as well as over the honey, and if it is too cold for them to come down on the bottom board, carry them into a warm room, and they will come down and carry it up into their comb. It will last them about two weeks. I think this a better way than to feed them on candy, unless they like it better than I do. R.

Chester, N. H., Feb. 7, 1860.

—

CLOVER HAY FOR MILCH COWS.

Some say that clover hay is in no way suitable for cows; but brother farmer, I will tell you what one of my cows did one week on clover hay. Her feed consisted of clover hay, first crop, one peck carrots, and three quarts of cob meal per day. The result was fifteen pounds butter. Some days her milk weighed fifty pounds. I doubt not but if her hay had been cut it would have amply paid the cost. The cow is about five-eighths English, the rest native. A SUBSCRIBER.

Deerfield, Mass., Jan. 26, 1860.

TAKE CARE OF THE EYES OF YOUR HORSES AND CATTLE.

Should your horses or cattle injure their eyes, so as to bring on a white substance or film, as it is sometimes called, do not, as I have seen some do, spit a mouthful of tobacco juice, or blow a quill full of snuff, into the eye; but let me tell you a better way. I take fresh butter newly churned, melt about one table spoonful, and turn it into the ear opposite the eye injured, being careful to hold the ear tight together so that they shall not by a violent shake of the head throw it out of the ear. This remedy may be safely applied if you do not use them when the film is coming off. C. A.

New Haven, Ct.

—

INDESTRUCTIBLE WATER PIPE.

An inquiry was recently made in your paper as to what is the best kind of pipe to convey water? I would recommend the indestructible water pipe as the best and cheapest. Pipe of one inch bore can be delivered on the steamboat wharf at Camden, Me., all complete, for ten cents per foot; elbows ten cents extra; other sizes in proportion.

GEORGE COLLINS & CO.

Camden, Me., 1860.

—

SUGAR BEET SUGAR.

Can any one give me the process of manufacturing the juice of the sugar beet into sugar? It is said that lime is used—but in what state the lime is, or in what condition the juice of the beet, whether before or during the process of evaporation, and in what proportion, I have not learned.

New Ipswich, Feb. 11, 1860. W. D. L.

—

PLANTING AND PRUNING PRIVET HEDGE.

Will the editor of the *Farmer*, or some one who has had experience in growing the privet hedge, inform me how near together the plants should be set, and of the time and manner of trimming.

North Bridgewater, Feb., 1860. J. T. B.

REMARKS.—We have never cultivated the privet, and leave the reply for those who have.

—

DISEASE AMONG CATTLE.

I have a disorder among my cattle that some call scurf, or runrounds. Please tell me what will cure it, and oblige JOHN J. LANG.

HINTS ON SHEEP MANAGEMENT.

Mr. L. W. Green gives in the Michigan *Farmer* the following ways and means of getting up the right kind of a flock:

First, then, I allow my ewes to breed till the spring they are three years old. I never desire to see twins. If they make their appearance, I give them an extra chance to keep them up with the rest of the flock. I never breed from any old broken-down ewes. I never allow my buck or bucks to run with the flock at any season of the year. I had rather tend my buck with one hundred ewes than turn him in with twenty-five. This course is very beneficial to the buck, and still more so to his stock. These are points that

any one will admit, that will reason for a moment. I never allow more than forty sheep to run together. I never keep my sheep in pastures where they cannot get on dry ground to stand or lie down. I raise carrots or rutabagas for my sheep instead of feeding grain. I have my lambs begin to come about the 20th of April, and take them away from the ewes about the 20th of August. In this way the lambs become weaned and take to feed before cold weather begins, and the ewes get up in grand order before winter, besides they are much more likely to bring lambs the next season. If at any time I have a sheep that does not appear to do well, I take it immediately from the flock, and if it does not readily recover, I kill, sell, or give it away. I give my sheep some kind of shed in winter to resort to when they choose. I never care about sheep having drink in the summer, if they have good pasture. Care should be taken not to give too much salt in hot, dry weather, where there is no water in the pasture. I keep a careful watch over my flock, and if I have any ewes that do not breed to suit me, I dispose of them and their stock. Much care should be taken with regard to injudicious crosses among sheep as well as with other animals, and don't forget or neglect to give your sheep a sufficient amount of feed in winter, or pasture in summer, to keep them in good condition. There are many items too numerous to mention here that will suggest themselves to the careful observer as the process of care and feeding advances.

For the New England Farmer.

HOW TO THAW OUT PUMPS.

MR. BROWN:—During the late cold snap, some of your readers have been obliged to ride off to the pump-makers for help to thaw out their wooden pumps. I found out a way to do this work, some years ago, which ought to be published often. It is this: Provide a lead pipe: three-quarters of an inch size is very convenient; a tunnel, and hot water. Put the pipe into the top of the pump, resting it on the ice. Now pour in the water, holding the pipe with cloths, as it will become soon too hot for bare hands. The pipe will settle right down into the ice, and very soon the pump handle will be going again.

Every wooden pump in an exposed situation, should have a small vent below the platform, where all the water above might pass out, and leave the pump in a safe condition. Copper pumps should be attached to the lead pipe by a brass coupling, similar to those used on fire engine hose. Then when any thing gets into the boxes, or the pump happens to freeze, it can be unscrewed and taken down for repairs, or examination. A brass coupling will cost one dollar at a Boston plumbers, and its cost may often be saved in a single year. W. D. B.

Concord, Mass., Jan. 10, 1860.

CRANBERRIES.—Will some of our correspondents inform us whether a natural cranberry meadow would be benefited by being thoroughly underdrained? That is, whether the meadow would be more prolific of fruit, or the fruit be larger and of finer flavor.

For the New England Farmer.

CRUEL TREATMENT OF HORSES.

The enlightenment and humanity of the present time are rapidly ameliorating the condition of the horse. Formerly, his treatment and management, by civilized man, was most unwise and cruel, but now, some believe that kind treatment and rational management are more economical and proper. Till of late, he has almost universally, when in harness, been tortured with the check-rein. Now-a-days, a small percentage of horse owners and managers do not use it. Some consider the rein to be both ornamental and serviceable. They have a fancy for a high head, and showy horse; and suppose, also, that this rein keeps the horse from tripping and falling—that it holds him up. *It is often the cause of his tripping and falling. It prevents his recovery from a fall.* With an unrestrained head he could more easily and readily prevent falling, when he might trip or stumble; or arise from a fall easier. He will not step any lighter and higher for the check-rein. It will no more hold him up than a man can be held up in slippery weather by a stock for his neck that throws his head back—face upwards! The check rein, that makes him a gazer at the sun by day, and the moon and stars by night, prevents his seeing the ground upon which he is travelling. When in motion, this check-rein causes quite a jar of the head, and a jerking of the bits upon the mouth.

The necks of horses differ in their formation, yet tasty coachmen and teamsters draw their heads equally high by this rein. In the days of stage coaching, a driver had all of his horses' heads checked up high and tort. One of the team could not draw up hill, so he whipped him soundly and severely at the hills, till a passenger observing the difficulty in the case of that horse, suggested to the driver the cause—that he could not work with his head drawn up so high—upon his being released from the check, the horse drew smartly up the hills afterwards. Drawing in the nose of the horse to his breast, by a short rein, or the martingale, cramps the cords of the neck and prevents the healthy circulation of the blood in the neck and head.

Blinkers are of doubtful utility. Horses are often startled by noises, the causes of which he cannot see with blinkers on. But the same noises do not affright them when not in harness, and they can see whence the sounds come. They increase the weight of the bridle, and deflect into their eyes both heat and dirt. It is not always that blinkers prevent skittish horses from seeing sights, at which they become affrighted, and the turning of their heads, then, away from these objects, rather increases than diminishes their fears.

The tail of the horse men have generally considered imperfectly made, unfinished naturally, so they cut off what they estimate worthless, or useless, the cords in it, and *set it up!* Some dock it, and then cut the cords upon its under side, and place it in the pulleys till it is stiffened, and will remain set up. Others fancy a long-tailed nag, with his tail set up, and perhaps will so cut and pulley it that it will remain bowed. The tail is a very serviceable instrument in its natural condition, for the horse to brush away the flies with, that so much annoy him a large part of the year;

when cut and stiffened, as it usually is, by the hand of civilized and humane man, the flies torment him unharmed. It is more graceful, unoperated upon, and is less in the way of the reins, when one is riding. It may affect the animal's strength to cut off these cords. The tail that has been set up, often trembles very much after he has been driven or worked hard.

The fetlock should not be shorn. God has seen fit to have the hair grow long there. There is rapid movement of the joint, chords and skin here, when the animal is travelling rapidly. Such length of hair is probably necessary for protection of this exposed part of the leg.

G. O. BETTON.

For the New England Farmer.

TAXES AGAIN.

MR. EDITOR:—I notice in the *Farmer* of today an article signed P., in reply to the few lines I sent you which appeared in your paper of Jan. 14. He says he "does not understand me to say that property should not be taxed equally and proportionately wherever it is found." Mr. P. is right. The object of my communication was to call your attention and that of your readers to the *inequality* of taxation, and your correspondent does not attempt to show that my position, in regard to the inequality, injustice and oppressive character of our laws, is not right; indeed, he admits, when he says that the "inequality would not be relieved by shifting the burden of taxation from the mortgager to the mortgagee, because all this would be guarded against by the mortgagee when he received his mortgage." If I understand him, his argument is simply this: the law is just as you represented it—unjust, unequal and oppressive, but there is no help for it, because the lender will take advantage of the necessity of the borrower, and secure a good bargain at all events. In answer, I would say, if you would have the people honest, if you would restrain the grasping, if you would prevent the miser grinding the faces of the poor, *make your laws right*—base them on principles of justice and equality. Laws have much to do with the consciences of men. A people never will be better than their laws, not often so good. The fact that some men *will* steal, murder, and do a thousand other wicked things, is no reason why we should by law *tolerate* such wrong doings. The suggestion of Mr. P., to secure a "full disclosure of property," it seems to me, is needless. The punishments for a dishonest invoice, as the law now is, provided the assessors do their duty, are the pains and penalties of perjury. I have no objection to a homestead bill, but I should much prefer some action to encourage young men to have a homestead. R. M.

Westboro', Jan. 28, 1860.

THE OTTER OR CREEPER SHEEP.—Our excellent brother HOLMES, of the *Maine Farmer*, says some account of this breed of sheep may be found in "Dwight's Travels." It appears that they originated in the town of Mendon, Mass. He adds, "We used to have them in Maine, but have not seen any for some years, probably they have become extinct. They were a good bodied, medium sized sheep, and very quiet. They were unable to run over stone walls or leap fences." Perhaps some person in Mendon, or its neighborhood, can give us some interesting facts in relation to these sheep.

WETHERSFIELD SEED SOWER.

Among the many implements which have been invented within a few years to lighten the labors and expedite the operations of farming, those are particularly important which come in use at the busy seasons of seed-time and harvest. While many of the heavier labors of the farm—the stump-pulling, the rock-lifting, the ditching, &c., can remain to a more convenient season, it is often essential to the growth of the plant or to the value of the crop, that the seed should be planted at just such a time, or the harvest gathered in under just the right circumstances. It is claimed that the little implement above figured will secure the proper and speedy planting of the seed. Operating as fast as a man can walk, it deposits at regular intervals, the proper amount of seed, covers and gently presses the earth around it, securing all the conditions in planting necessary to a quick and healthy germination. No other preparation is necessary for it than to see that the soil is properly pulverized and levelled, and that the ordinary conditions of seeding, which no judicious seedsman will neglect, are observed.

It sows garden seeds of all kinds, adapting itself readily to all sizes, from the mustard seed to the kernel of corn, and all shapes between the round, plump pea, and the flat, scaly parsnip.

It comes from a town better known than perhaps any other in New England, as a seed-raising town, and having the endorsement of many of the farmers and seed-growers of that town, we can safely recommend it to the careful notice of our readers. It is advertised in our columns this week.

LEGISLATIVE AGRICULTURAL MEETING.

[Reported for the New England Farmer by Thos. Bradley.]

The sixth meeting of the present session of the Legislative Agricultural Society was held in the Representatives' Hall at the State House, on Monday evening, Dr. George B. Loring, of Salem, in the Chair. The subject for discussion was "*Agricultural Education*," it having been continued from the previous meeting.

On taking the chair, Dr. Loring said he had understood that the subject for discussion would be "The Feeding of Stock," and he was intending to address the meeting on this, having expressed his views on education before, but he thought the two subjects might well be considered together, as they were so closely allied. Agriculture, said he, lies at the foundation of all education, and the subject might profitably be discussed throughout the entire series of meetings, and then not be finished. Agriculture, without education, must be to a certain extent a failure; there have been exceptions, both in Europe, and in our own State even, but these were exceptions, and did not affect the rule.

The speaker said his chief object in appearing before the Board of Agriculture, as stated at the previous meeting, was to urge the publication of an agricultural manual for our schools, so that the young might take an interest in it, and profit by it. Chemistry, said he, is a pleasant and interesting study, so is botany, and more than this, to make agriculturists of our children, we must impress on their minds the importance of it. Now a farmer's child is taught to consider that every profession is higher than its father's, and until we show the falsity of this, we cannot hope to see agriculture prosper.

I want to see topics discussed in our schools that will so interest children that they will go home and talk them over at the fireside; I want them taught what sheep are, what kind are profitable to keep, what the cost of keeping is, what their wool will sell for, how much they eat, and what is best to feed them on; what every tree is, what stock is, what manures are, and the various kinds for the various crops, &c., and by imparting such knowledge as this, boys will go home from school knowing that something good can be done on our farms. Then will be time to establish county schools and agricultural colleges, but the education should be begun in our common schools, at once.

The speaker then said there was another source of instruction he would mention, and which was of the utmost importance—the introduction of good agricultural books into the farmer's family. What is more interesting in literature, he asked, than good agricultural books? No Congressional Documents go through the country so fast or so far, or are half so much sought after, as the "Patent Office Reports on Agriculture," poor as those are, and this shows the great amount of interest that is taken in the profession.

Dr. Loring said that he considered agriculture as an art, rather than a science, and asked, in this connection, whether there was any man who could tell which was the best method of feeding stock? He thought there was not,—as it had not yet been discovered, so far as he had heard. He had tried it for a number of years and had not found it out. Cattle, said he, eat what is placed before them—what they can get, but he had never heard of the man that had solved the problem as to what was the best feed. Cato said the best branch of agriculture was to feed stock well, and the next best branch to feed stock moderately. He, Dr. Loring, supposed that the best feed for cattle was good English hay; you may, said he, steam corn stalks and fix up some kind of palatable feed, but it was an open question as to what was the *best* feed. There is no rule, and, when the question was discussed, he would give the maxim of Cato as the ground to commence upon.

Rev. Mr. Stebbins, of Woburn, being called on, said that his remarks at the previous meeting had been of a rambling character, and he was glad to have this privilege of speaking more connectedly on the question. Agricultural education, said he, is a subject of the greatest importance, and lies at the bottom of stock feeding. The sciences which lay at the bottom of agricultural education are chemistry, botany and geology or mineralogy. The relations of vegetation to the soil and of the soil to vegetation, he said, are necessary to be taught in our schools. A child should commence by learning the names of plants around him, their structure, the atmosphere best suited to them; the names of insects, and whether they are destructive to vegetation or otherwise, the best methods to destroy the destructive ones; then the names and habits of birds, and what kinds are injurious to the crops, and those which should be allured to remain on the farm. All these things can be taught, said he, while the children are sleeping or trying to sleep in the school, and would be far better and more useful studies in after life than many other things that are now taught, and might be commenced with the youngest scholars.

Dr. Stebbins then alluded to many subjects on which much time is wasted in teaching scholars, and argued that the time devoted to these would be more than was necessary in learning agricultural branches. He said that the brain of the child in our public schools is now overtasked, and our children are so fully engaged in studies they have

so little interest in, that it tends to make them idiotic.

He was opposed to establishing new schools expressly to teach agricultural education, as he considered it would be folly, but he would begin in our common schools. He said he had told what was done and could be done in our lower schools, but he would consider the higher ones. Here pupils were found studying algebra and geometry, things that in ninety-nine cases in a hundred would be of no use to them, although much time was spent in their study; it would be far better to teach the boy how to raise and feed stock. He would not ignore algebra and kindred studies, but he would give the boy a term or two of these, and then teach him what would be useful to him as a farmer or mechanic.

It had been asked, where shall we get teachers? He would answer, do the best we can, and he felt sure that when the want was expressed it would breed the supply. Should this want be manifest, those who are preparing themselves for teaching would attend to this, and in a short time we should have all applying for situations thoroughly conversant and able to go creditably through an agricultural examination.

The difficulty, said he, is not that we have not educational machinery, educational power or educational interest, but that we keep along in the old scholastic method of teaching. He thought that if our Board of Education required agricultural education to be taught in our four Normal schools, the want of teachers would be quickly supplied. He had no faith in any great establishment for teaching agriculture at present, nor had he at any time, as he thought the present educational facilities of the State were ample, if they were properly directed.

In closing, he again urged the importance of this education, as the theoretical knowledge thus obtained by a boy, with his father's practical knowledge, would unite the two more every day, and thus make the profession a pleasure.

Mr. WETHERELL, of Boston, said he thought the arguments used in support of agricultural education had been erroneous. If, as had been said, no one knows how to feed stock well, how are we to teach our children? There is so much difference of opinion in regard to chemical analysis that the most celebrated professors do not agree, thus making it impossible to teach. In educating the mind of a child we must discipline it, and not lumber it with facts. He spoke of the indisposition there was in the mind of both teachers and pupils to study agricultural works, and as an illustration of this, instanced the work of Prof. Johnston, entitled "Agricultural Catechism," which had been generally introduced into the schools of New York State some time since, and was now scarcely known. Speaking of Chemistry in its relation to successful agriculture, the speaker said he did not see the necessity of a thorough knowledge of this to raise large crops, as the Chinese, who know nothing of this science, produced larger crops on a given area than any other people in the world. He thought that if a child was taught a good common education, he would learn farming fast enough without being specially taught it in school.

Rev. Mr. STEBBINS remarked that he would have all that would be useful in after life taught to children, and this teaching commenced when they were young. In our higher schools, said he, the age of the pupils ranged from 16 to 20, and he thought young persons of this age were fully able to understand and analyze the soil; indeed, he thought that in the common schools the majority of the scholars were of an age and capacity to take an interest in learning this study.

Mr. D. W. LOTHROP, of West Medford, said he had attended the meetings of the Society and listened to the discussions on the different subjects, and he had come to the conclusion that farmers seemed to think that all they wanted was capital or manure, and apathy was in a great measure the result. This question of teaching agriculture in our schools is a new thing, and the first thing to be established is, that we need this science of agricultural chemistry before we ask to have it introduced as a study. In his opinion, we should not introduce a system of any one class, thus forestalling the minds of our youth in selecting a trade or profession. He said he thought there was not more than one boy in forty, in the schools of our State, who designed becoming a farmer, and this was a strong argument against introducing this new feature. An agricultural college, in his opinion, was not needed here, and an inquiry into the aims of those in England he considered would settle this matter. In the English agricultural colleges it was sought to give the children such an education as should fit them for farm laborers, as the pupils were composed of the children of this class, and by this means make them more valuable on a farm, but still keep them from rising, and he quoted from Coleman's work, in proof of his deduction. It must be borne in mind that, here, a man having three or four sons has only one farm, and consequently has to leave that farm to one, thus cutting off the others, who have to get a living in some other way. Now, if it was, as had been stated, a fact, that these farmers' sons helped to infuse life into the learned professions, and to make successful merchants and statesmen, why check this immigration, as the prosperity of our country and State as much depended on the success of our cities as our farms.

Hon. JOSEPH WHITE, of Lowell, said the question in his mind was, not whether men shall be

educated as agriculturists, but whether agriculture shall be taught in our school. He agreed fully with Rev. Mr. Stebbins, that the man or woman should be educated to the business of life. A man is not to be a corn-feeder or stock-raiser alone, but his education should have a wider and broader range than agriculture. The State opens her munificent hand to give all a general education, and the only science that should be taught, ought to be the science of manhood and womanhood. He believed no man could be an agriculturist, unless he was educated, and he thought the better educated a man was, the better farmer he would make; indeed, he thought a collegiate education would make better farmers.

Mr. ASA SHELDON, of Wilmington, being called on, said he could best judge of the importance of education from the want of it. He thought mothers should take more interest in this matter, and should teach their children their first lessons in agriculture. If mothers would only teach their boys and girls how honorable agriculture is, there would more of them stay at home, and there would be fewer boys running round hunting up clerks' situations in cities. He spoke of the rare occurrence of a farmer getting committed to our prisons, and closed by complimenting the ladies on their presence at the meetings of the Society.

Mr. GARDNER, of Swansey, said he was not inclined favorably to the introduction of agricultural books in our common schools, as he thought there was enough taught there now, the children not having time to devote to it.

The time for adjournment having arrived, Mr. Gardner was cut short in his remarks. It was announced that the subject for discussion at the next meeting, would be "*Stock Feeding*," and that Dr. GEORGE B. LORING, of Salem, would preside, on which occasion ladies were particularly invited to attend. The meeting then adjourned.

UNFAVORABLE RESULTS.—People generally are disposed to say as little as possible of unprofitable bargains and of unfavorable experiments. Mr. J. H. Stanwood, of Colebrook, Ct., publishes in the *Homestead* the results of two experiments of this kind which he has recently tried in feeding roots and cotton-seed meal to a milch cow. Up to Dec. 25, the cow had been fed solely on good upland hay, and gave 141 pounds of milk, on the hay-feed, during the week preceding the trial of roots. For one week, in addition to hay, she ate half a bushel of turnips and mangolds each day, and yielded 140 lbs. of milk, being a falling off of one pound. The next week he fed two quarts per day of cotton-seed meal, at a cost of forty-three cents, and the cow gave 149¼ lbs. of milk, being a gain of about four quarts, worth about nine cents, at the prices obtained by the experimenter at his door; "leaving a balance," he says, "of thirty-four cents in favor of letting the meal alone."

On these experiments of a single week, Mr. Stanwood rejects both roots and cotton-seed meal. Such brief trials are of but little value to the experienced feeder, and we notice them rather by way of caution than commendation.

For the New England Farmer.

"SICK CATTLE."

When, Messrs. Editors, in a most laudable desire to impart benefit to the many, a contributor to your columns offers knowledge that he deems beneficial, there is seemingly a lack of courtesy and decorum in venturing to attempt to prove his adopted views as unprofitable. Yet sure, no one ought be offended, if others' opinions vary from those another has preconceived, provided the variation be kindly expressed. I make these remarks, because I so largely differ from your correspondent at Brimfield, in his suggested cure for "Sick Cattle," as given in your recent issue. The communication advanced seems to have been offered from reading the loss sustained by Winthrop W. Chenery, Esq., through a disease developing amid his cows, said to be "Pneumonia," or "Inflammation of the Lungs." Of this I know nothing. Neither pretend I to suggest a cure, in any case similar. What I would deal with, is the remedy your correspondent proposes, "in all kinds of stoppage or bloat from any cause," in cattle. And as the subject of chemistry, by a sort of necessity, has been the peculiar study of my life, I will endeavor to state chemically why I deem his remedy most hazardous.

Your correspondent recommends vinegar and chalk administered quickly, for, as he says, "a bottle is not strong enough to hold it." Now, what are the chemical properties of the agents named? "Vinegar," or "acetous acid," it is well known, possesses strong antiseptic powers, and its action on the living body is gently stimulant, but astringent. "Chalk, or carbonate of lime," is an anti-acid. In pharmacy it is employed for the preparation of "carbonic acid gas." Mixed with vinegar, this "gas is largely evolved, leaving as a residuum, a most nauseating salt, offensive in the extreme, and according to the best chemical writers, (unlike most salts) holding no purgative quality, whatever." Both articles being thrown into a living stomach, all that can be obtained from them will be an immediate, rapidly effervescent mixture, disgusting beyond expression, forming an after salt, wholly absent from all purgative qualities, and at once distending the stomach and all the vessels approximate, with a suffusion of "carbonic acid gas," injurious in the extreme. If pressing for a passage through the intestines be the sought object, the proposed remedy is wholly worthless, for the distension attendant on the pressure of such a volume of gas must of consequence bar all doors, rather than soothingly open them. Escape must be had at once for the introduction of this violent agent, else death will ensue. For, if "no bottle be strong enough to hold the mixture," what can be expected from a stomach? And if the case were "pneumonia," (as

with the cows of Mr. Chenery,) a pistol bullet would not be more inevitably prompt, in deadly efficacy, than the blending and administering of "chalk and vinegar." An acid and anti-acid combined must by acknowledged chemical law evolve "carbonic acid gas," and this, in large quantities, if received into a stomach, is deleterious in the extreme. And here I would state a case, that became cognizant to me, as occurring in this place, some years since, of a young lady recovering from a typhoid fever, and while in a most feeble condition, having swallowed from the hand of her physician what he denominated a "foaming draught", (being a full mixture of sub carbonate soda and tartaric acid,) expired before aid could be administered, the carbonic acid gas evolved at once producing strangulation. Availing myself of the very appropriate remarks, Messrs. Editors, you appended to your correspondent's communication, I offer these few suggestions, earnestly cautioning all persons to avoid a proposed remedy so utterly opposed to all well attested chemical laws, and, may I say, so repugnant to all judicious treatment. The presence of any great quantities of gaseous formation in the stomach, we all know, is ever attended with the most distressing consequences.

To establish my doctrine, I simply would cite a story told me by a present distinguished physician of Boston, relative to the decease of an ancestor of his, "whose death, as recorded on the tomb stone, was occasioned by an over-indulgence on a supper of beans, which produced a windy colic, and wafted his soul to heaven." Urgently, then, I advise all to shun the admixture of "chalk and vinegar," or any other agent disposed to an undue evolution of "carbonic acid gas" in the stomach, even if its result be a salt of highly purgative character, which that from "chalk and vinegar" surely is not. OAK HILL.

Feb. 15, 1860.

STEAM CULTIVATION.

This is the great topic at present with English farmers. A paper "On the Forces used in Agriculture," recently read before the "Society of Arts," by Mr. J. C. Morton, is exciting much discussion. The money value of power as exerted by steam, by horse, and by man, is stated by Mr. Morton to be as follows: steam can meet a certain continuous force, at a cost of six cents per hour; the same, if supplied by horses, would cost 20 cts., and if supplied by manual labor, no less than $3,60 per hour. In the remarks which followed we are glad to perceive that the importance of improving the directing power—the English laborer—both as regards his physical and mental forces, was urged by every speaker. Prof. Wilson of the University of Edinburgh, remarked, that

"To the laboring man steam has been, and always will be, a friend; it relieves him from the hardest and worst portion of his duties, and raises the value of his higher (mental) power—skilled labor. The industrial history of the country teems with evidence of the benefits conferred by steam machinery on the working classes, not less in increased employment than in increased wages for it; and few departments of industry offer greater opportunities for its development, than in that connected with the productive powers of the soil. But the machine, to be complete, needs the directing skill of the man. He is essentially one of its working parts; and as in mechanics it is an axiom that the strength of the whole is only equal to its weakest part, it is clear that the efficiency of the machinery we use materially depends upon the knowledge and skill with which it is directed. I cannot refrain from expressing a very strong opinion that our farmers will find it to be greatly to their interests in a pecuniary point of view, to say nothing of higher motives, to endeavor at once to improve the condition, both moral and physical, of their laborers, and prepare them for the new duties they will be expected to perform."

For the New England Farmer.

LONG ISLAND LANDS.

GENTLEMEN:—The advertisement and notice in your paper of the Lands on Long Island for sale by me have elicited numerous inquiries, and knowing the interest you feel in the subject of agriculture generally, I venture to ask your permission to answer a few of the queries through your columns. One of the many correspondents asks what we propose to use for cellar walls in the absence of stone upon the land. I answer, we use bricks, which are made in the vicinity, and can be had at from $4 to $6 per thousand. Also, stone, which can be easily obtained at small cost.

Some persons have used a "Gravel Wall," from the material taken from the cellar a few feet below the surface, with a small quantity of lime and cement. I visited a gentleman a few days since, who has lately erected a fine house upon a farm of 200 acres, originally a part of this tract advertised, and he has one of the finest cellars I ever saw, made in this way, and he informed me it cost much less than either brick or stone. I am asked about water. There are several streams in the immediate vicinity of this tract, and, as I say in the advertisement, we can procure the best water in the world, by wells 20 to 40 feet deep. Also, as to cost of fencing; we do not propose to fence at present, except around the garden and buildings. I believe it is generally conceded that it is far better to keep cattle yarded, soil-feeding, and save all the manure; this is now the practice here. But chestnut and locust timber is abundant in the immediate vicinity, and fencing material can be had at very reasonable prices.

Another writer asks, is there any "Fever and Ague?" Answer; none. Also, can produce be marketed at remunerative prices? Yes. Every thing that grows upon the Island can be sold at once for cash, at the highest market price that the cities of New York and Brooklyn afford, and they are the best in this country, if not in the world. Everything, even to a bundle of rye straw, can be sold every day for cash, and this is the great advantage that Long Island farmers and gardeners have over other parts of the State. The Long Island Railroad Company transport freight at low prices, and they propose to continue, (as they have done,) running a nightly train to deliver by a barge of their own in connection with their Railroad, produce of all kinds at the principal market

in New York city, (Washington,) early every morning, thus enabling farmers at this distance to compete successfully with those near the city, and using their own teams, as the cost of transportation is less by railroad.

The produce is sent to reliable commission merchants, who dispose of it and make returns in many cases without seeing the owners at all. One other, and I am done. I am asked by another if, as I say in my communication, I never saw these lands until last September, how I can judge of its productiveness? I answer, by the crops I saw upon the ground, recently harvested, by the stubble, by the newly-made gardens and fruit trees therein; some in bearing, and all of the most thrifty growth; by the united testimony of all who have settled upon these lands within the past five years, and by the great similarity, (I may say identity,) in geological structure and natural productions of the soil of these new lands with those of Flatbush, Flatland, Jamaica and other places on Long Island with which I have been well acquainted for several years, and where the farmers make their farms pay a good interest upon a valuation of from $500 to $1000 per acre, prices at which they are held.

One word in regard to the cost of clearing and plowing. A gentleman from Canada has just purchased a tract in sight of these lands advertised, and has contracted for clearing, burning over, and plowing, turning over handsomely 30 acres by the first of May next at $12 an acre. He paid $25 an acre cash for his land. I think the price for clearing and plowing too high, and believe I can do the same work with my own men and teams at much less price.

I am asked about grist mills, saw mills, schools and churches, all of which are within two or three miles of this land. Indeed, two new school-houses have been erected recently in new districts, one within 40 rods, this land being in the district.

New York, Feb. 8, 1860. AARON STONE.

For the New England Farmer.

AGRICULTURAL EDUCATION.

MR. EDITOR:—One of my neighbors, who is apt to be inquisitive of other men's business, asked me this morning, "What do they mean by proposing this as a topic for discussion by the Legislative farmers, at their proposed meeting on next Monday evening?" I told him I supposed they meant to point out the best mode of educating boys to be good farmers. "Fie upon your education of boys to be farmers," said he; "put them at work under the personal supervision of a good farmer, and let them work from the age of sixteen to twenty years, and do all the kinds of work that he has to do, and there is no doubt they will be sufficiently learned to manage a farm, as soon as they are fortunate enough to get one."

I am inclined to think this man's ideas were pretty near the mark, provided these boys have been properly taught at school before they arrive at the age of sixteen. I say properly taught—by this I mean, they should have learned all the branches usually taught in our schools, together with such principles of chemistry and mechanics, as come into daily use on a farm.

First, I would have a boy so expert in the use of the tools of the shop that he could make or mend all the tools that he may have occasion to use on the farm. This they could learn at any time after they are twelve years of age. By knowing this, many steps and much money will be saved. There are always days, rainy or otherwise, when odd jobs of this kind can be attended to. The farmer has to learn early, that "a penny saved is equal to two pence earned," and when he does a thing himself, he will have no occasion to complain that it is not well done. I know they tell about founding agricultural schools, with learned professors to lecture on each of the sciences. But what does it all amount to? I want no better professor than was my old father, who had sinewy arms and a powerful body, and who acquired his knowledge by long-tried experiments.

Feb. 11, 1860. ESSEX.

EFFECTS OF WINE UPON THE HABITS OF A PEOPLE.

We transfer to our columns with pleasure the fair and kindly expressed criticisms by the editors of the *Country Gentleman*, upon remarks of ours made at a recent meeting of the Legislative Agricultural Society at the State House. We will merely add, that the friend who made the statements to us in regard to intoxication and the use of wine in France, formed his opinions, not merely upon passing through that country, but upon the observations extended through a period of *eighteen* months, and a period of *twelve* months in Italy. He is an intelligent, candid man, has travelled extensively, but has no Munchausen propensities whatever. We are informed that the writer of a recent history of Hungary—that rich and beautiful but ill-fated land—states that in travelling its entire length and breadth, sleeping nights at the houses of the common people, and eating at their tables, as well as mingling with them in villages and cities, he rarely saw an intoxicated person in the country! But cheap, light wine was the common drink, at their meals, and at other times. All classes used it, rich and poor, men, women and children. How can these reports, so widely different, be accounted for? Perhaps at a future time we may venture some solution of them.

SIMON BROWN, editor of the *New England Farmer*, in speaking of the importance of the culture of the grape, urged the manufacture of wine as a means of promoting temperance and preventing drunkenness. A friend, he said, had travelled in France, and had seen but few intoxicated, and that results were similar elsewhere. We have a high respect for the opinions of our friend of the *New England Farmer*, but we think that here he has been induced to favor an error. It is true he is not alone in his opinion; several other distinguished cultivators have adopted the same; and it may therefore be proper to state briefly a few facts relative to the subject. Public statistics are more reliable than private opinion, or partial observation. A careful examination of many jails

and prisoners has shown that about nine-tenths of the crime is caused by intemperance. Yet it has been found a few years ago that crime was increasing in France *six times* more rapidly than the population. A distinguished banker in Paris has given the returns of the quantity consumed by that city. The amount was 130 bottles of wine and 6 of ardent spirits, consumed on an average by each inhabitant, within the walls. Outside the walls, there was no excise, and the amount was much larger. The amount consumed in France was 1,053,797,854 gallons of strong drink of all kinds —over a thousand million gallons—an average to each person of forty-two and a half gallons a year —equal to four and a half gallons of pure alcohol to each. In the United States, at the same time, there was only a gallon and an eighth of alcohol consumed by each person. Some travellers pass rapidly through France, Italy, and other countries, visit the cities and splendid streets, see nothing behind the scenes, and then return home and report "no drunkenness in wine countries." But others who have examined more thoroughly have told a different story. J. Fennimore Cooper said some years ago, "A residence of six months in Paris changed my views entirely. I have taken unbelievers with me into the streets, and have never failed to convince them of their mistake in the course of an hour. On one occasion we passed *thirteen* drunken men in an hour." An eminent French general stated that "the ration to each soldier was a bottle of wine a day—the use of that bottle only stimulated the appetite for more, and their small pay was usually squandered to purchase it—that want and insubordination in the army could be traced to wine; and most of the crime and poverty, especially in the districts, to the same cause." When Louis Philippe was king he expressed his conviction to a distinguished American "that total abstinence was the only true temperance, and that the drunkenness of France was on wine." His son made a similar remark, and added that "it would be a blessing to France could all the grapevines be destroyed, except so far as they furnish food."

For the New England Farmer.

LAYING NEW SHINGLES OVER OLD ONES.

Some time within two years, I think, inquiry was made through the *Farmer* relative to this subject. I have searched for it, but do not readily find it, so I must depend upon memory. At the time the inquiry was made, I thought I would reply, but hoping that some other person would do it, I neglected it. I have often thought of it since, and have looked carefully for some further remarks, but having seen none, and thinking it a matter of too much importance to pass longer unnoticed, I will give the result of my observation.

The practice of laying new shingles over old ones has been in vogue here a number of years, is constantly gaining favor, and has become quite general. The objections to the plan are, that it takes longer nails, and is, consequently, a little more expensive: and that any water which may leak through the new covering will be retained by the old longer than by the boards, if the old shingles were removed; hence the roof will be liable to rot sooner. Practically, however, these objections have but little weight. Roofs thus covered are found to be more nearly impervious to water than single covered ones, and they are a much better protection against snow, very seldom admitting any, consequently they are warmer. I have had several roofs shingled in this manner within a few years, and I like the plan much. The general favor in which the practice is held, is pretty good evidence of its utility.

I intend to collect some facts relative to this subject, and if I obtain any of general interest, I will place them before the readers of the *Farmer*. I hope others will also give their experience in the matter. L. VARNEY.

Bloomfield, C. W., 2d mo., 1860.

EXTRACTS AND REPLIES.

CRANBERRY MEADOW—HUNGARIAN GRASS SEED—OIL MEAL.

I have a piece of land that is quite wet, cold and sour; it bears grass only fit for bedding. I want to know, if the land is suitable, how to proceed with it, in order to fit it for cranberries; how to set the plants, and at what time to set them? *(a.)*

Can I get the Hungarian grass seed in your city? If so, where and at what price, what time to sow and cut it, and if a middling quality of soil will produce a fair crop? *(b.)*

Also, the cost of linseed oil meal per hundred, and if given to cows, will it cause a greater flow of milk? *(c.)* G. A. GIBSON.

Westfield, Mass., Feb., 1860.

REMARKS.—*(a.)* If the land is covered with bushes and coarse grass, flow it two or three years until they are killed—then set the plants twelve inches apart, in October, and flow it through the winter. If you cannot wait for this process, cut the bushes and burn them, grub off the hassocks, and make the meadow as level as you can. If you *cannot flow* the land, set the plants as early in the spring as you can. We cannot tell you whether the land is suitable or not, without seeing it; but almost any moist land will produce cranberries, if bushes and grass are kept away from them.

(b.) Hungarian grass seed is sold by Nourse & Co., 34 Merchants' Row, for about $4 per bushel. Sow in April, and cut for fodder when in bloom, or for seed when the seed is ripe.

(c.) Oil meal is selling at about $2 per hundred pounds. It will increase the flow of milk when fed to cows.

THE ONION DESTROYER.

Nothing has been heard from the son of the Green Mountains about his remedy for the onion destroyer, since his reduced proposal to sell out, for the moderate sum of sixty thousand dollars. An investment that, abating all contingencies, if judiciously placed, would yield a constant income of three thousand dollars a year, during life, and leave a permanent residuum for the little ones. What a pity that such enterprise should not be adequately rewarded? If I should guess (as all Yankees are privileged to do,) he did not find the

boys on the borders of the salt water so green as he hoped they might be. What! decline to pay this moderate sum for a discovery that will replace it in full every year! Beyond question, the onion crop in Essex county alone, amounts to many hundred thousand dollars annually. If one farmer, on a small farm of fifty acres, raises 5000 bushels annually, how much may be expected from 500 such farmers?

Feb. 22, 1860.

—

TOP-DRESSING GRASS LANDS.

When is the proper time to top-dress grass lands? Or, is it always necessary to plow before dressing?

Why do many good farmers allow their cattle to remain in the yard, or other out-of-door places in cold weather? Is it more healthy or profitable in any way than keeping them in the barn?

Mendon, Vt., 1860. W. C. WALKER.

REMARKS.—A good time to top-dress grass lands is immediately after the hay crop is taken off; the fine manure settles down among the stubble where the dews moisten it, and it soon finds its way to the roots of the grass, reviving and starting them into vigorous action, instead of drying away and dying, as they too often do. Late in the autumn, just before snow falls is also a good time; so is the last of March, while the ground is frozen, and just in season to catch the spring rains that will wash their fertilizing properties into the soil.

We cannot give you any other reason why *good* farmers allow their cattle to remain out of doors in cold weather, except it is they think it promotes their health. In moderately cold weather, cattle may enjoy the liberty of the yard for a portion of the day, and it seems to us that such liberty must be beneficial to them. Much, however, will depend upon the circumstances under which they are placed. If they are fed in the yard, and all sorts of stock are out together, jamming and hooking each other about, it is doubtful whether they will derive any advantage from this use of the yard.

—

COLTS ON A HARD FLOOR.

One of your correspondents has stated that colts should stand on a hard plank floor in order to toughen them for a hard road. It looks to me like putting hard thick shoes on an infant's foot to raise corns that will trouble him for life. Let colts stand on a soft, moist floor. W.

New London, N. H., 1860.

—

REMEDY FOR WORMS IN HORSES.

Feed the horse for two or three days in succession on good, bright corn stalks, green or dry, and in the meantime give him nothing else to eat.

—

TO CURE POISON FROM IVY.

Rub the part poisoned with sweet oil. A small portion rubbed on the skin before going among the ivy will prevent taking poison.

TO KILL VERMIN IN CATTLE.

I saw in your last monthly an inquiry—"How to kill Lice on Cattle?" The remedy I use, and I find it always produces the desired effect, is to steep tobacco in urine, and wash the animal thoroughly with it. L. B.

Meriden, Feb., 1860.

REMARKS.—All such washes must be used with great care. Tobacco is a dangerous article to use. Cattle are liable to take cold after such washings. A little sweet lard melted and rubbed thoroughly over the skin, if persevered in, will usually answer all purposes. Any other pure oil may do as well. In confirmation, read the following as a sure method of

DESTROYING VERMIN ON COLTS.

Take flax seed (linseed) oil, and rub the harboring places *thoroughly* to the skin, and the vermin will swell up, die and drop off. It is very safe and sure. E. H. D.

Boston, Feb. 10, 1860.

For the New England Farmer.

THINNING OUT PINES.

MR. BROWN:—I noticed in your paper of last week an article in reply to an inquiry about thinning and trimming pines. I fully agree with your correspondent in regard to trimming off the dry limbs and letting the green ones remain. I think it is well to let nature have its course. But I am a Yankee, and consequently I go in for improvement. Not for improving nature, but for assisting it, and improving the growth of the timber lot; I believe that nature can be assisted in growing timber as well as in growing corn. Pines, in order to flourish, must have room according to their size. Young white pines that come up on an average two and a half feet apart, may remain so until they are ten or twelve feet in height; then, in my opinion, they should be thinned out gradually, as they increase in size and height, until they stand full twenty feet apart; I think that some fifty years hence, one tree standing on a base of four hundred square feet, with a diameter of two feet, and a spindle seventy or eighty feet towards the zenith, would be better than sixteen trees on the same base with a diameter of six inches on an average, which I think would not be far from the result, if all were allowed to grow.

Amherst, N. H., Feb. 1, 1860. D. N.

POSSIBLE DISTANCE OF DRAINS.—In the *Canadian Agriculturist*, for February, we find an earnest word of caution from a correspondent, who says that a year or two since he wrote an article recommending drains to be only eight yards apart. Further experience and observation has satisfied him that in many cases this distance may be greatly increased. He is now satisfied that he had thrown hundreds of pounds away, and is sure others have thousands, and he wishes to prevent this in future. He cites a case stated by Mr. Mechi, in which a field of twenty acres was drained by a single drain, four feet six inches deep.

DESIGN FOR A COMPLETE FARM-HOUSE.

We present the reader, to day, with another of the natural, (and truthful, because natural,) designs of our accomplished artist, Mr. G. E. HARNEY. What we mean by *natural*, is, that the artist so mingles the work of his own hands with the works of nature, making the blending so graceful and harmonious, that a true taste is never offended by its contemplation. Indeed, his pictures look as though they *grew*, rather than that they were made!

Mr. HARNEY will be kind enough now to step forward and explain his own beautiful design in his own language.

"When we speak of a *complete* farm-house, our country friends fancy to themselves, a dwelling that shall contain every convenience necessary for the carrying on of the household portion of the farm labor; at least, such is the idea we have of it, and in the composition of the present design, we have endeavored to supply those conveniences.

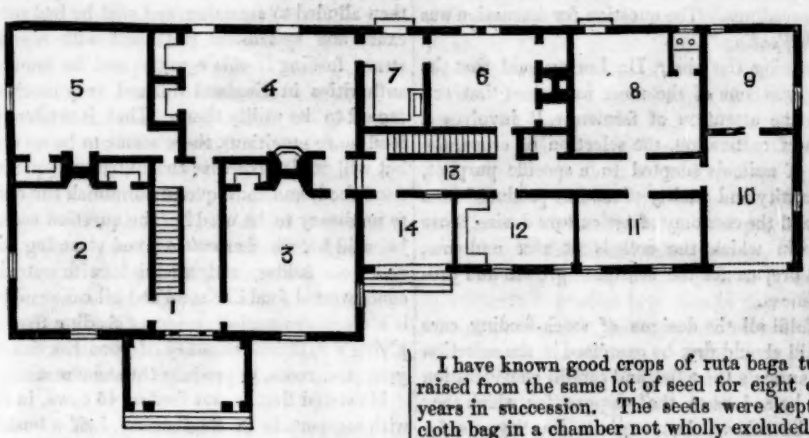
There is nothing at all showy about the house, either in design or plan; it is a plain, substantial farm-house, nearly square, with a large L on one side—our aim having been to insure convenience even at the expense of ornament—though, we think, after the house has become two or three years old, and brightly flowering vines begin to cover its sides, and trees to throw their shadows upon it, that it will have a cosy, comfortable, home-like appearance, quite in contrast with the *shingle palaces* of late so fashionable among us.

Our plan comprises the following accommodation: No. 1, hall 7 feet 8 inches by 19 feet, opening into No. 2, parlor, 15 feet by 16; No. 5, bed-room, 15 feet square; No. 3, living-room, also 15 by 16 feet, opening into a back entry; No. 13, and across it into the kitchen, No. 4, 15 feet by 20; this kitchen contains two large closets and connects with a pantry, No. 7, which measures 7 feet by 10, and is fitted up with a sink and shelves. The next room *en suite* is the back kitchen and wash-rooms; it contains two closets, a large oven and boiler, and measures 16 feet by 12; it opens into the back entry, through which we pass to the wood-room, No. 8, 14 feet by 15; No. 10, carriage shed, and No. 9, work shop. The back entry is 4 feet wide, and contains stairs to the chambers and cellar. On the front, doors open into the dairy, No. 11, 7 feet by 14; the store-room, No. 12, 7 feet by 13, and upon the sheltered porch, No. 14.

The second floor contains eight chambers, besides bathing-room, dressing-rooms and closets. The attics may be left unfinished.

Construction—This house may be built of wood, and covered in the common manner with clapboards.

The roof of the main house projects 2½ feet, and that of the L, 1½ feet; the cornices are supported in brackets 3 inches thick. The windows



and doors, inside and outside have plain architraves, 5 inches wide.

Cost, in New England, about $3,500."

For the New England Farmer.

THE EFFECT OF FROST ON PLANTS.

MR. EDITOR:—In the December number of the *Monthly Farmer*, 1859, I noticed an article entitled "Facts for the Scientific," and signed "P. ," Vermont, in which the writer relates a singular circumstance of a neighbor having planted a field with French turnip seeds, and the young plants all going to seed the same year. I once had a similar phenomenon happen to a plot of young beets, and presuming that the result may be traceable to the same cause in both instances, I will relate my experience. I do not remember the exact date, but about 20 years ago, I had my ground prepared, and beets planted as soon as the season would permit. The seeds came up finely, and the plants had reached the size of four and six leaves, when the weather became very cold, and the earth froze to the depth of two and three inches. Fearing that my young beets would not make any farther progress, I had another plot of ground prepared immediately and planted with seeds from the same lot with the first, but the plants in the first planted bed lived, and after a few days recommenced growing. I had them thinned and cultivated, but in two or three weeks discovered that they were all going to seed. Not a root was produced larger than a person's finger, and of a tough, woody substance, while the later planting produced roots of the usual good quality. The stalks of the first planting reached the height of two and a half feet, when my husband ordered them to be exterminated, fearing that the blossoms on the precocious plants might injure the crop of beet seed, that he was raising in their immediate neighborhood. We held a family council on the subject, and were unanimous in opinion that the unusual cold weather had the same effect on the plants that the keeping over one winter does, and as last season was an uncommonly cold one, frost in every month, it is not impossible, but altogether probable, that the effect of cold on the young plants produced the singular result.

I have known good crops of ruta baga turnips raised from the same lot of seed for eight or ten years in succession. The seeds were kept in a cloth bag in a chamber not wholly excluded from light and air, and the products of any seeds will, undoubtedly, be perfect in their kind, so long as their vitality is sufficient for germination. If there are any seeds left of the lot from which that field was sown last season, I hope that the experiment of planting them will be tried again, and the result given to the public.

While on the subject of beet raising I will say to the lovers of young beet-tops for greens, that it is a good way to clear the cellar of the old beets and set them out early in the spring for sprouts, as they can have them earlier, and in greater profusion, and save much labor and garden room; and if cooked while tender, they are equally good with the young plants. MRS. N. DARLING.

New Haven, Conn., Jan. 28, 1860.

CROPS OF OLDEN TIME.—In one of his letters written in England, the editor of the *Country Gentleman* states a fact illustrative both of the progress of English agriculture and of the length of time which some of the English records cover. In the year 1387, nearly five hundred years ago, on the Manor farm of Hawstead, in Suffolk county, 66 acres of wheat produced 69 quarters of grain; and 26 acres of barley, 52 quarters and 2 bushels—that is, wheat at the rate of less than 8½ bushels per acre, and the barley at the rate of about 16 bushels. The present average production of wheat, on the other hand, is calculated at about 28 bushels per acre.

CUTTING BUTTER IN COLD WEATHER.—To cut a slice of butter from a large roll in cold weather—first dip the knife in hot water, and all trouble of breaking the butter will be avoided.

LEGISLATIVE AGRICULTURAL MEETING.

[REPORTED FOR THE NEW ENGLAND FARMER BY THOS. BRADLEY.]

The seventh meeting of the series of this society was held in the Representatives' Hall at the State House on Monday evening, Dr. GEORGE B. LORING, of Salem, in the chair. There was a large attendance, and much interest was manifested in the proceedings. The question for discussion was *"Stock Feeding."*

On taking the chair, Dr. Loring said that the subject was one of the most important that can occupy the attention of farmers. It involves a system of cultivation, the selection of crops, the choice of animals adapted to a specific purpose, the quantity and quality of manure produced on a farm, and the economy of agriculture during those months in which the soil is at rest and man should prepare for the season of growth and productiveness.

To fulfil all the designs of stock-feeding, care and skill should first be exercised in the selection of the animals to be fed, and careful consideration should be had as to the purpose for which they are to be selected in any given locality—as for beef, for milk, for young cattle, store cattle and dry cows.

Certain constituents of food animals require under all circumstances, viz.: sugar, starch, gum, oil, mineral matter and nitrogenous compounds, and the amount of these demanded is in proportion to the waste of matter in the body. Fattening cattle, milch cows and working oxen require more than dry cattle or young cattle kept for store.

These constituents are contained in hay, straw, grain, roots, oil-cake, &c., and the object of every feeder should be to obtain these in the most economical manner, due regard being paid to his farm and his market.

The speaker considered good English hay as the basis of all the most satisfactory food for stock, as it contained all the constituents he had named in a form bulky enough for our ruminant animals which require woody fibre for digestion. Its nutritive qualities are more concentrated than in straw, and less than in corn; fed liberally, and with proper judgment, it will supply all the wants of cattle on which no immediate demand is to be made, and the manure made from it is rich enough for all ordinary purposes. So much cannot be said of any other bulky articles of food. Straw, corn fodder and meadow hay will serve for variety, but they will not do as a substitute, and whenever they are used to produce beef or milk, they require a large proportion of more concentrated nourishment, such as grain, roots and oil-cake. He compared animals fed solely on straw or meadow hay to a pair of inflated bellows, and said that by examining a meadow hay fed cow and calf in the spring, and using their manure, the full effects of coarse feeding upon the animal economy and upon the farm would be very apparent.

He said his own experience showed that meadow hay, combined with even a moderate quantity of a more nutritious article, was good. He then alluded to steaming, and said he had seen no exact and systematic statement with regard to steam feeding in this country, and he found that authorities in England differed very much with regard to its utility there. That it renders poor food more nutritious, there seems to be no doubt, but will it also increase the nutritious quality of good food, and consequently diminish the quantity necessary to be used? The question seems to be, said he, whether cutting and steaming coarse and poor fodder, and mixing it with nutritious, concentrated food like meal and oil cake and bran, is a more economical mode of feeding than supplying a sufficient quantity of good English hay, grain and roots, to produce the same result.

He stated that he was feeding 40 cows, in milk, with ten pounds of English hay, half a bushel of roots, two quarts of shorts and a quart of cotton seed meal per day. Calling the hay $20 per ton, and the roots 20 cents per bushel, high prices at the barn, and the grain five cents per day for each cow, he found it cost 25 cents per day to keep each animal in the milking herd. The cattle are in excellent condition, and he saved the expense of steaming, fuel, cutting the hay, and the time and labor of mixing the feed. He wished to know the cost of feeding cows some other way.

Dr. Loring then spoke of root feeding and soiling, and said that in a northern latitude, in the neighborhood of cities and large towns, too much attention could not be paid to the raising of roots for cattle, as these are useful in every section, but more so near large places, and might be advantageously used wherever farmers are obliged to purchase their grain for winter forage, in the production of beef; and in illustration of this, he said that the beef raisers in Western Pennsylvania last year might have saved a vast amount of money when the corn crop failed, if they had raised root crops instead of depending on Ohio for corn. He said there were dairy farms where butter and cheese were made, and where the cows were dry all winter, where hay was very cheap—$8 or $9 per ton—where there was no necessity for a root crop.

Speaking of soiling cattle, especially milch cows, he said it may be useful and profitable where a market is near and pastures are scarce, but when a cow could be pastured for eight dollars a season, it seemed hardly judicious to adopt any other mode of feeding.

He then spoke of the use of oil cake here and in England, and showed that while we use less than 5000 tons of cake, the English use 240,000 tons, and while it has been freely offered here for 1¾ cents per pound, in England, the farmer has paid 2¼ cents for it. The extraordinary difference, said he, in the estimation in which it is held in the two countries, is worthy of careful consideration. It is probable, he further said, that the quantity per cow used by our farmers is too great, and he understood that the English farmer gave one quart per day to a cow, and for fattening sheep he said it was almost universally used in England.

It is true, said he, that we have no definite system of feeding among us, but perhaps this is impossible, as the crops, markets, the object and expense of feeding, all differ in different localities, and in this, as in every other practical operation on the farm, each man must exercise his own ingenuity in ascertaining what he is to feed to the most advantage, and how he is to feed it.

On motion of Mr. Eddy, of Oxford, the rule was amended so as to limit speeches to ten minutes.

Mr. HOWARD, of Boston, said the suggestions about oil cake were important, and the wonder was how we exported so much. English and Scotch farmers had informed him that it fetched $10 and $15 per ton more there than here. In relation to English stock feeding, there were two or three important points he would explain. 1. The English and Scotch farmer has generally a better knowledge of the feeding qualities of the animal than we have, being able to tell the value of the cattle on putting his hand on them, as to whether they would pay to feed for beef or mutton. 2. They have a more systematic mode of feeding, and then they consider the quality of the manure and its quantity. On the latter point he said that it was known that oil cake abounds in nitrogen, and the cereal crops destroy a large amount of this, consequently the manure from animals fed from oil cake produces more wheat, and is so much more valuable. He said that Mr. Russell, of Fife, Scotland, contended that this manure made a difference of from a penny to two pence per pound in favor of wheat.

ELIJAH WOOD, Jr., of Concord, said he had been farming for twenty years, had cut a good deal of poor meadow hay, and it had been his study how to feed this advantageously. He commenced with four cows in the milk business, and then cut 20 tons of English hay, and in 15 years he kept 24 cows on the same farm. If, said he, I can attribute my success to any one crop, it is millet. I first cut 1½ to 2 tons of millet, and soon increased to 20 tons. He said he had fed mostly for 10 years on English and meadow hay, mixed with oil meal, two quarts to a cow, which he considered equal to four quarts of Indian meal, and the cows held their flesh better on oil meal than Indian; the quantity he fed, he did not think injured the milk.

He leased a second farm, and on this, last year, he used 1100 loads of manure, as it was about run out, and proposed to do the same this year, and he could see the advantage of doing this, as where he now got 30 tons of English hay, in five years he should get 90 tons; and next year he expected to get 60 tons. He had raised most kinds of roots, but where he could get, on his farm, $12 per ton for carrots, 80 cents a barrel for ruta baga, and 12½ cents per bushel for flat turnips, he preferred to sell them to feeding them to cattle, as he thought it better to buy grain He further said he considered oil meal at $35 per ton cheaper than corn at $1 per bushel.

A cow in milk will eat 23 pounds of long hay mixed with four pounds of meal a day. He said he was not using meadow hay alone, but mixed it with less than a sixth part of English, and three pounds of cob meal, but he found that the substitution of the third pound of meal for the half bushel of turnips he had used until within a few weeks, did not quite keep the cows up in milk, but as he had not sale for any more milk, he thought he had done well in adding only one pound of meal to the feed. Millet is not so good as English hay, but is worth ⅔ or ¾ as much. He sowed a peck to the acre. Mr. Wood said he would give his cows four quarts of meal if he could sell all the milk he could make.

Dr. LORING said that Mr. Bowley, of Cirencester, England, a prominent dairyman and cattle-feeder, used no grain, and thought it would be more for Mr. Wood's interest to raise more roots and less grain. He, Dr. L., had laid in 6000 bushels of roots this winter, and he thought they would save him much in hay, and improve the condition of his stock. He had conversed a few days since with a very intelligent Berkshire farmer, who had told him that, for feeding stock, the best crop he could raise was buckwheat.

Mr, THOMPSON, of Nantucket, said he had a friend who kept 25 cows in milk. He cut much English and meadow hay and had his corn-stover. When he takes in salt hay and corn stover he puts it in layers so as to cure it through. He then runs it through the cutter and feeds to dry stock, and on this they come out well. Mr. T. said that he proposed to his friend to reduce his stock to 18, and to sell one quarter of his English hay and lay the money out in oil meal, Indian meal or dry feed, and he thought his cows would come out better and his manure would be worth more from the 18 than it was from the 25 cows. He fed as follows: As much hay as the cattle would eat clean, with one quart of Indian meal, and two quarts of

shorts, and the consequence was he had more, and better milk, and his 18 cows were worth more than the 25 would have been. He used no roots.

Mr. GARDNER, of Swansey, was in favor of root feeding, and said he had seen cattle kept in good order on straw, given morning and night, with half a bushel of roots at noon. Corn fodder was good, and he would give as much for the corn-fodder from an acre of ground, as for the English hay, produced on an acre for stock feeding. The question, in his opinion, should be, how can a man do the best with what he has?

Mr. ASA SHELDON, of Wilmington, considered English hay and Indian corn the best articles of food, and the relative value of roots as follows: 4 lbs. of potatoes or carrots equal to 1 of corn, while 8 lbs. of turnips were equal to the same quantity. This latter he considered very poor feed for working oxen. The profit on turnips depended on the location where they were raised, as where manure was cheap near large cities, they could be much more profitably raised than where it was worth $8. Hay does not follow so well after turnips or potatoes, as they draw hard on the soil. Some farmers have not much meadow hay, but Mr. Sheldon said that the farmers around him were obliged to think it worth something. He said he considered land that produced good meadow hay, requiring no expense year after year but that of cutting the crop, was as profitable land as a farmer could have. He thought sugar was needed to make meadow hay approach the English. He said he chopped his meadow hay and mixed it overnight with warm water sweetened with a little molasses in a tight box, thus steaming it, and he found it did very well. He also gave his cattle many small potatoes, not being able to afford to give them the larger ones, as he had a good market for them, and he considered this was good for them. He considered Indian and rye meal about alike, though he preferred the latter for milk. He also thought one ton of dry corn-stalks well cured are worth more than the same green, and as good as a ton of English hay, and that working oxen would travel longer on corn buts than on any other food. He convulsed the audience with laughter by relating to them a couple of anecdotes of feeding cattle with roots alone.

Mr. WETHERELL, of Boston, spoke of the stock of Mr. Peters, and argued that although his feed was poor, by regularity and system he kept them in excellent condition.

Col. HEARD, of Wayland, considered a corn crop was one of the best a farmer could grow, but the great trouble was, farmers did not cure it properly. He cut corn at the roots, a little later than is commonly done, and cured in the air, as he considered this better than curing in the shade. He alluded to a neighbor of his, Josiah M. Thomas, whom he considered a model farmer, and gave his plan of feeding twenty cows. In the winter he puts them in the barn, and keeps them there until spring, feeding them three times a day on cob meal and oil meal, and watering them twice. His stock is kept for milk, and he thinks his corn crop the best. He buys but little manure.

Mr. LATHROP, of South Hadley, spoke of his experience in feeding stock, and recommended the selection of the best animals, and then the best feed, as he considered cattle improved so much better on the best than a medium quality of food. He would give them all the good hay they will eat, and two quarts of meal per day. He spoke of oil cake and cotton seed cake, and said that among his neighbors the latter had been found, as fed, to be fatal to calves, and that it caused cows to give milk at the expense of the carcase. He related the experiences of several of his neighbors, and said that now, when they feed cotton seed cake, they grind the seed after the fur, which was supposed to be the injurious part, had been separated, and feed it clean. This was thought to be good, and he had heard no complaints of any injurious effects.

Mr. EDDY, of Oxford, advocated regularity of feeding, and the preparation of the food so that the cattle would have the most time to rest and digest it, as an important element in feeding stock.

Two or three other gentlemen spoke on the same subject, when the chairman hoped farmers would experiment in steaming food so as to be able to report next year on a matter of so much importance. The meeting then adjourned to Tuesday evening next.

The subject for discussion will be, "What are the best measures that our agricultural societies can adopt to satisfy the public conclusively which are the most profitable breeds of cattle for the farmers of New England to keep on their farms: 1st, for the dairy; 2d, for the yoke; and 3d, for the shambles?" Hon. JOHN S. ELDRIDGE, of Canton, will preside.

TO CORRESPONDENTS.—The comparative leisure of winter, with the farmer, and a new impulse which has awakened thousands to a sense of the pleasures and profits of the profession, lead, as we supposed it would, to a more direct, personal interest in its affairs. This is made evident in the unusual attention paid to the *matter of writing for newspapers*. There is no way in which one can gain agricultural information so readily and so rapidly, as by *imparting his own knowledge to others*. He feels the responsibility of an assertion, and observes and studies for the facts to sustain

it, so that our correspondents bless twice in their labors—first themselves and then the reader. We intended to say only this when we begun to write—that we have recently received a large number of excellent articles, with great thankfulness, and that we shall use them as fast and as appropriately as we can.

For the New England Farmer.

WHAT IS THE CAUSE OF THE POTATO ROT?

MR. EDITOR:—I do not know that you want to read or hear anything more upon this subject. You may regard it as a question already decided by the clearest and strongest possible evidence, by ocular demonstration, and thus placed beyond the possibility of a doubt. Without wishing to excite a doubt where no doubt ought to be entertained, yet considering the importance of the question, and the danger of being deceived and led astray by outward appearances and pretended causes, I would urge a more careful and thorough examination into all the alleged facts and circumstances in the case. For, after all that has been said and done upon this subject, it is believed, that the real cause of the rot still remains unknown, and that the question is yet undecided. That insects are not the cause of it, is very evident from the following reasons:

1. So far as my knowledge extends in this locality, all the most delicate and early kinds of potatoes, such as the Jackson Whites, and others of like character, when planted very early, on rich and mellow soil, entirely escape the rot, because the tubers come to perfect maturity, and the tops all die, before the season of the rot commences, so that, afterwards, neither the blast nor the rot affects them.

2. My second reason why insects cannot be the cause of the rot, is, that if we plant in the same field and in the same neighborhood, some of the same kinds of potatoes, alluded to above, at the usual time of planting, that is, a few weeks later, we shall find that they will blast and rot, if it be a year in which the rot prevails generally.

3. My third reason why insects cannot be the cause of the rot, is the fact, that the blast and rot do not occur every year, but only take place in intermittent years; whereas, if they were caused by insects, they would have to take place every year in order to give the insects an opportunity to propagate their species: otherwise this particular kind of insects would become extinct.

4. My fourth reason why insects cannot be the cause of the rot, is, that the disease does not manifest itself in all places equally, or alike, but is confined to certain localities, more frequently to low, wet lands, and soils highly enriched by active, concentrated and stimulating manures, and extending along one side of a field, or across one end, or through the middle, and not over the whole field generally.

5. My fifth reason why insects cannot be the cause of the rot, is, that however widely, extensively and generally the blast prevails, it frequently turns out to be nothing but a mere blast which kills the tops and checks the growth of the tubers, but leaves them all smooth and bright, and, to all appearance, entirely unaffected by disease, which would not, and could not be the case, if the blast were caused by insects on the tubers.

6. My sixth reason why insects cannot be the cause of the rot, is the fact, that all kinds of potatoes are not alike affected by the disease, but, on the contrary, some kinds are entirely exempted from it; such is the fact with regard to the black potato and some others.

7. My seventh and last reason why insects cannot be the cause of the rot, is the fact, that the potato rot always manifests itself, if at all, at a particular time, within the limits of a few days, which time is always preceded by the most remarkable thermal changes in the state of the atmosphere—by a few days of extremely hot and dry weather, succeeded by copious, warm rains, and accompanied by an oppressive, sultry and muggy atmosphere.

Such are my reasons for disbelieving that insects are the cause of the potato rot. Though I have offered but seven reasons, and I believe them all to be true and valid ones, yet, if only one of them shall stand the test of examination, and prove to be true, the insect system is as "dead as a door nail." I freely admit, that I have no microscopic glasses to look through to aid my vision; but, if I had, I do not think I should become a convert to the insect system, because what is now regarded as a cause of the disease, may be only a concomitant of it, or that which follows of course. For instance, because I have found some decayed and decaying vegetables full of insects, must I therefore infer that the insects are the cause of the decay? Or because I have found a dead sheep full of maggots, must I therefore infer that the maggots have killed the sheep? You will readily perceive from the foregoing, that I regard the insects as an effect or consequence of the disease, and not as the cause of it. I repeat, therefore, that the cause still remains unknown; the question is yet undecided.

Warwick, Mass., 1860. JOHN GOLDSBURY.

For the New England Farmer.

HOW TO RAISE GEESE.

MR. EDITOR:—I recently found some inquiry in the *Farmer* about raising geese, and as I am an old hand at it, I thought I would reply. When they commence laying, which is usually April or May, a box with bran or cotton on the bottom should be provided, so that the eggs will not roll about. As often as there is an egg laid in the box, the rest of the eggs should be turned over very carefully. When the goose is done laying, and wants to set, she will make her nest, feather it, and set on it; the nest should then be taken out very carefully, and a nest made with about four quarts of horse manure and some chaff on that; let it be made large and commodious, and then lay the nest that the goose made on the other very carefully, not disturbing the straw nor feathers. Fill in all around the nest, making it about level, so that the goose can go on and off with ease.

The goose sets four weeks; mind the time correctly. Two or three days previous to the time of hatching, place the eggs in a broad, deep thing, with milk-warm water enough to let them swim, and those that have live goslings in them will bob round and swim, and those that have not, will

sink or be still; the gosling will break the shell on the end that stands out of the water.

Do not put the eggs in water after the shell is broken, but drop some water on the goslings bill when the gosling is hatched and is nest-dry. Take it in the hand, and with the thumb and finger press the bill open and drop in a pepper corn, and then some sweet cream; have ready some green turf, place it round the nest, and sprinkle on it some Indian dough, where the goose will pick, and learn her young. They are a very tender fowl, and require care till their feathers are grown, after that they need not be fed, if they run in the road. They can be plucked three times the latter part of the three summer months; some think it very wicked to pick them, but they shed all that you pick, quills and feathers; they can be tried, and if they come hard, wait a week or two. Do not let the young go to the water too soon; have a short thing for them to drink out of; if they should get chilled, take them to the fire and put warm ashes on their back, and feed them with cream with a tea spoon.

Two geese are better than three, and one is better than two, as they are apt to beat each other, and unless they hatch all together, they will beat the young. When I kept geese, I fed them on corn till the grass grew, and not after that till they were fatted in the fall.

I am over 60, and write without spectacles.

Derry, N. H., 1860. MRS. S. PILLSBURY.

For the New England Farmer.

THOUGHTS SUGGESTED BY FEBRUARY NUMBER OF N. E. FARMER.

Page 58.—By a slight change in the words of an old aphorism we have, on this page, a rule of life, or an aim to direct our steps in it, which, if practically and generally adopted, would work a most gratifying change, both in the consciousness of those adopting it and in the impressions which their changed mode of living would make upon observers. We refer to the rule or aim thus expressed—"We should not live to work, but work to live." Quite too many lives are framed by a different and a less noble and less sensible plan. Thousands live as mere drudges, toiling and slaving through all the work their physical strength will endure, not because it is necessary that they should do so in order to live comfortably, tastefully, nobly and usefully, but for some less sensible, less worthy, less elevated purpose. But though we would fain make an effort to demonstrate the superiority of this life-plan, and of its fruits or results, and to recommend thus and otherwise its more general adoption, we must, for the present, leave it with each reader to consider the two different schemes of life brought before him in the passage referred to on this page, and to ask himself if there is not here a hint by the adoption of which he might make his life more noble, more dignified, and more satisfactory; less of a wearisome toil and drudgery.

Page 58—*Abundance of Weeds.*—The large quantities of weeds here mentioned seem to be an exaggeration; and if so considered, this brief article may fail of its intended effect. But if the readers who are disposed thus to regard the numbers here given would make a trial for themselves with any clover, grass, or other small seeds, which they may propose to sow in the spring, they might find enough of weed-seeds to make them more cautious and careful as to this matter, ever after.

Page 62—*Subjects for Discussion in Farmers' Clubs.*—It needs but a small degree of penetration to perceive that Mr. Pinkham has looked a little deeper into subjects and questions concerning, and connected with, the rights and interests of farmers, than is usually done. He may have arrived at some conclusions which are erroneous and exaggerated; but all farmers, even those who may differ most widely from him in opinion, should be ready to acknowledge their great obligations to him, inasmuch as he has, most impressively, arrested their attention, and fixed their thoughts upon matters which are so intimately related to their rights and interests as a class. Mr. Pinkham will be gladly and gratefully listened to by discerning and thoughtful members of our hard-working fraternity, whenever he may be pleased to address them upon any of the questions and topics which he has now and recently proposed for consideration. A few exaggerations in estimating the cost of a crop of corn will not greatly trouble the more discerning, for they will see that the drift of Mr. P.'s suggestions reaches farther and deeper than the mere profit or loss of any particular crop or department of farm business. We hope leisure, inclination and opportunity will permit Mr. P. to place us under still greater obligations to him; which he will certainly do every time he gives us, either a mere glimpse, or a pretty full disclosure, of his somewhat peculiar, but very important, cogitations upon the rights and wrongs of farmers, or the promotion and neglect of their interests as a class.

Page 63—*Cost of Keeping Cows.*—Among the indirect or incidental advantages likely to result from the discussions originated by Mr. Pinkham's recent communications to this journal, this is likely to be one, viz.: a reconsideration of the question, what is the value and proper price to be charged by farmers for pasturing cows for the residents of a village? We are inclined to think that Mr. P.'s estimate that pasture is worth about 8 cents a day, or 50 cents per week, is more nearly correct than that which forms the basis of the usual practice of charging 25 cents per week. Our reasons for thinking so are chiefly these two:—1. One acre of ordinary pasture is not sufficient to provide sufficient sustenance for a cow for half a year, or the pasturing season. The experience of dairymen in the dairy counties of England affords sufficient proof of this. In Gloucestershire, for example, about nine-tenths of the land on the dairy farms is in pasture, and the usual practice is to keep at the rate of 25 cows to each hundred acres. One acre and a half of grass is the smallest allowance usually made for each cow during the summer and fall, and this is sufficient only when the grass is very abundant, or in fields which have been under-drained and top-dressed with fertilizing materials. Two acres are required for summer pasture, and two more for winter hay, when the land has not received extra care, or is not more than ordinarily productive. The cost of keeping a cow is estimated in Gloucestershire at $20 for the summer and $25 for the winter, and in Cheshire, another county famous for cheese,

the cost of keep for a cow is calculated at $17,50 for the pasturing season, and at $27,50 during the winter. 2. Allowing then that a cow requires for fair keeping as much grass as two acres will produce, the farmer who provides pasture at 25 cents per week, or as is the custom in several places, at $5 for the season, gets wonderfully poor pay for the produce of two acres. To get anything like a proper compensation, or "to save himself," he must pinch the cows, by putting on more than at the rate of one cow to each two acres. He ought to have $5 or more for each acre.

MORE ANON.

VALUE AND USES OF ROOT CROPS.

We have often urged the importance of roots as a feed for stock, as the medium or means through which to bring up our farms to a higher state of fertility. After many years of observation of their use, together with a personal use of them during the same period, we feel quite free to say that their general cultivation and judicious use will result in a greatly improved and profitable husbandry throughout New England. There are many reasons for this opinion which we might give here, but prefer to waive them for the present, in order to make room for some statements in regard to recent crops obtained by another hand.

The paper from which we quote, was an essay read before the *Concord, Mass., Farmers' Club*, by Mr. JOHN B. MOORE, of that town, and without any expectation of its being published on the part of the writer. It was one of the essays of the Club, regularly read at the meeting immediately after the reading of the journal of the preceding evening. The writer had been speaking of the profits of the potato crop over that of raising milk, and added,

"Then there are other roots besides potatoes, which I think we should cultivate more extensively for feeding to our stock, and as a substitute to some extent for grain. Carrots for horses and oxen are, as a portion of their feed, worth certainly one-half as much as oats per bushel; and no feed keeps a horse more sleek and healthy, and they can be raised for less than *twelve cents* a bushel in an ordinary season. I had only ¼ of an acre of carrots last year, and they cost me as follows:

	Dr.
To plowing and harrowing ¼ of an acre 3 times	$1,50
To 10 loads compost manure, charge ¼ to crop	7,50
To carting manure, spreading and seeding	1,50
To interest on the land	1,50
To hoeing and weeding	7,00
To harvesting	3,00
Amounting to	$22,00

Or at the rate of $88 an acre. The crop was 180 bushels of carrots, for which I was offered $13 per ton in Concord. Deduct the worth of the tops, which I think were well worth $2, and the cost of raising them would be 11 1-9 cents a bushel. They were grown in the following manner:—Sown about the last of May in rows 2 feet apart on a flat surface; hoed with a wheel hoe, thinned and cleaned before the weeds had a chance to get much of a start, and afterwards kept clear from weeds throughout the season. A large item of the cost of cultivating roots of all kinds, but more particularly carrots, is the weeding. This expense can be reduced one-half by proper management, and in this way: When you prepare your land for the seed, be sure and have the soil finely pulverized and smoothed with a rake or brush-harrow, and without any stones or rubbish of any sort being left to interfere with the operation of the wheel hoe. Let the rows be sown perfectly straight, for with straight rows you can run the wheel hoe faster, and much nearer to the plants, by which you will save a great amount of finger work; then be sure to weed and thin them as soon as they begin to show their second leaves, as at that time it will not be more than one-half as much work to weed or to thin the plants as it will be if you let them go a week too long.

Last year I had half an acre of ruta bagas, grown on an old piece of pasture land, broken up with a sward plow, about the 20th of May, and with the intention of improving the pasture; it was manured with a compost made with 40 horse-cart loads of peat muck, 200 bushels leached ashes, and $5 worth of ground bones, which was spread evenly on the soil and worked in with a horse-hoe. The seed was sown with a machine, in rows thirty inches apart, on a flat surface, about the 25th day of June, and afterwards thinned, and cleaned from weeds as soon as the plants showed their rough leaves.

The after cultivation was done by a horse and cultivator passing through the rows three times; there was harvested from the half acre 350 bushels of very fine and smooth ruta bagas, after the leaves were trimmed from them.

The cost of the same is estimated as follows:

	Dr.
To 40 loads of compost manure, one-half to be charged to the present crop	$18,00
To plowing	1,00
To carting manure, spreading and working it in	3,50
To seed and seeding	50
To interest on the land	1,50
To weeding and thinning	2,00
To harvesting	6.00
Amounting to	$32,50

And at the rate of $60 an acre, deduct the worth of the tops, estimated at $2,50, and the cost would be 8½ cents a bushel.

I also raised quite a lot of sugar beets and mangel wurtzel, which cost me a fraction less than 7½ cents a bushel. The beets I grow in a different manner, and on a soil much more moist. They are sown on ridges made by turning two furrows together—tops raked down, and one row of beets

sown on each ridge; plants thinned to 10 inches apart. But to grow roots at the cost I have named, it is necessary that all the details should be attended to, in their proper season. For instance, if a person seeds a piece of land with carrots, (a plant which when young is rather tender,) and leaves the soil full of hard lumps, and the surface covered with rubbish, it will be more work to weed them, the plant will not come up so evenly, and the result will be a partial failure of the crop, while it will cost more to take care of than it would if it had been done right in the first place; these remarks will apply to the cultivation of other varieties of roots also.

If I am right, and we can grow ruta bagas for 8 or 9 cents, and sugar beets, and Mangel Wurtzel for 7½ cents a bushel, or even at a few cents more per bushel, would it not be a cheaper feed than grain or oil meal? Sugar beets and Mangel Wurtzel I regard as a very excellent feed for milch cows. By giving a cow one peck of beets twice a day in addition to hay, you will get a reasonable quantity of good healthy milk, which you need not be ashamed to sell, or to make into butter.

But if a person wishes to sell milk, and is willing to sell anything that he can run through a cow's udder for milk, he can probably get a larger quantity by substituting oil meal or some feed of that nature for the beets, for one or two years; but for a term of five years, I have no doubt a cow would produce more milk by being fed with the beets, than they would with the oil meal. Beets have this advantage over ruta bagas; they can be kept in a house cellar as easily as potatoes, and without any unpleasant odor from them.

It is very certain to my mind, that the whole value of roots for feeding to cattle, is not entirely in the amount of nutriment that they contain, but they also aid in the digestion of the hay, and other feed, and in reasonable quantities promote the health of cattle of all kinds. I think that a large portion of the loss sustained in cows, every year, results from feeding oil meal and grain in large quantities. The garget, I think, is often caused by the same thing, which creates an unnatural extension of the milk vessels, followed by an inflammation of the udder, and often results in a serious loss in the value of the animal so affected; by feeding more roots and less grain, that would be remedied to some extent.

I do not wish to have it understood by these remarks, that I would advocate the exclusion of grain from the feed of stock, and particularly of milch cows, but that for winter feeding, I would use a larger quantity of roots, with less grain than many now feed, both on the score of economy in keeping, and the greater durability of the cows. It is said by eminent writers of agriculture, that the increased cultivation of turnips in England and Scotland has done more for the interest of agriculture, within the last fifty years, than all other improvements combined, and that it has put millions of dollars in the pockets of the farmers of those two countries. If the culture of turnips has done so much for them, then the culture of the various kinds of roots ought to do something for us."

For the New England Farmer.

WORMS IN APPLES.

MR. EDITOR:—I was interested in your Groton correspondent, Mr. White, in relation to the "worm in apples," not the apple worm, described in your last issue. I have a sweet apple tree on my grounds in New Hampshire, about sixty miles from this city, the fruit of which is of a superior quality for cooking purposes. I have noticed that this apple, when first ripe, early in September, is very clear, and free from the apple worm. I do not recollect of ever having seen a worm of that description, in the fruit; but within the past few years, I have noticed, that after the apple has been taken from the tree in a ripe state, and kept ten or fifteen days, the worm described by Mr. White appears in the meat, scarcely perceptible at first, but in full size is about one-eighth of an inch in length. They are very abundant, and perforate the whole apple, leaving it like a honey-comb inside, while the outside is perfectly fair and smooth. I have never seen the worm in any fruit, except the sweet apple. I know of no preventive, except to use the fruit when first ripe, as you would cook fresh meat in warm weather, before being subjected to the outward influences which fresh meat is too often subjected in the summer season.

Boston, Feb. 28, 1860. J. D.

For the New England Farmer.

PIPES FOR CONDUCTING WATER.

In your paper of this date I find an answer to my suggestion in yours of Jan. 28th, about "pipe for conducting water," by the Boston Belting Co. —or rather by Tappan, McBurney, & Co., which is good as far as it goes—but as you remark, "It is information that will be valuable to many persons," I wish to know more about this pipe—

1. How long will it last?

2. Will it make the water taste of India-rubber?

3. Is it wholesome? and this last is the most important item.

I know of an elderly farmer in this town, who being out of health, thought lead pipe the cause, and dug a new well this last year to have water handy, and by some way to avoid lead pipe.

Another who was out of health, and was persuaded to think lead pipe was the cause, took it out of his well less than a year ago and put in gutta percha. The lead pipe he took out was as clean and as pure lead color as the day it was put in—no corrosion or appearance of decay. This was from a well of soft water, as pure as water could be from any well. A READER.

Billerica, Feb. 16, 1860.

"ADVICE" ABOUT FARMING.

Farm described—Advice asked—Uplands exhausted—Deficiencies made up by income from woodland—Why lands are not prolific—Meridian of life passed—Profits of farming—$600 expended and nothing gained by it—Means of making old age comfortable—Cranberry culture—True farming very little understood.

WE HAVE a letter before us from "W. J.," Wells, Me., describing his farm of 80 acres, in general terms, and one or two portions of it in special terms, and asking our "advice," as to what course he shall take to make it more profitable. The writer states that he "is past the meridian of life, and there seems to him but one chance more to see the old farm brought up." This chance, if we understand him correctly, lies in the reclamation of a swamp and appropriating it to cranberries. He adds—"my *upland* is very much *exhausted*, and my *timber lot* is also on the decline, which I, as well as my neighbors, have had to resort to, to fill up the *vacancies*." To fill up the vacancies! Those words are quite significant. They mean, probably, that the cultivated products of the farm have not supported the family, and the spontaneous growth of the forest has been resorted to, to make up the deficiency, or in the expressive language of the writer, "*to fill up the vacancies.*"

Now these "vacancies" are just as much the natural result and consequences of an *exhausted upland*, as it is a natural result that water shall run down hill,—or that the store-keeper should soon have nothing to sell from shelves which he is exhausting every day, and which he does not fill again. It is as unreasonable to expect that land can be perpetually cropt, and still continue productive, as it would be that the meal chest or flour barrel should continue full without ever adding to them.

The wise and beneficent Author of nature has so ordered things, that we are to supply our necessities and comforts by our *industry* and *skill*, and without the exercise of these we shall gradually go back to an aboriginal condition, the first indications of which, with the farmer, is "exhausted uplands," and a resort to the products of the forest or the sea, in order to eke out sufficient for subsistence.

The very fact that the uplands fail to produce their former supply, that they give evidence of gradual inertness and exhaustion, is as much cause for alarm to the farmer as to the merchant, when he finds his sales returning him less than his goods cost. Both inevitably lead to bankruptcy; but with this difference,—the loss on the merchant's goods does not cut off the prime articles of life, while that of the farmer strikes at the very means of existence, because what he produces sustains not only himself, but his surplus sustains all others, gives speed to the locomotive, wings to commerce, and life and activity to the loom and anvil, as well as every literary, artistic and scientific pursuit of man.

Our correspondent adds, "I have two sons, one of whom is of age, and he will take hold with me, *if I can make him believe that farming can be made profitable.*" Have you not made him believe it? How did you begin life? Did the 80 acres, with their buildings, come to you by descent, or have you earned them as thousands of others have done, with your own hands? If you earned them, and have supported yourself in the mean time, there is the evidence of profit. If you inherited them, have they not sustained you, and enabled you to bring up the family, providing them with a tight roof, a good bed and ample table all their days? And after food and shelter has been supplied, have they not always enjoyed that other prime blessing of life, a *home* to turn to, when sickness, or hunger, or fatigue has claimed relief? Have not the profits of farming furnished all these, and a thousand times more, even though your uplands have become *exhausted*, and your lowlands have produced but little, compared to what they would have done under skilful management?

We are sincerely desirous to give you profitable advice, and the more beneficial it should prove to you, the more happiness it would confer upon us. But how can we do it? We know nothing of the nature of your soil—its composition, accessibility, locality, whether it is arable or not, what are its advantages for drainage, and other means of amelioration; nor any thing of your markets, or of the prices which products might command. Nothing short of a personal examination could enable a person to answer *profitably*, the questions you propound. A gentleman once asked us similar questions, after having expended $600 to improve a large field, without accomplishing his desires. We could not advise him satisfactorily, without looking upon his land, any better than he could judge of the value of this paper, without ever reading, or hearing a word of its contents! After visiting the land, and the suggestions we made were carried out, he informed a neighbor that the advice springing from a single hour's examination was worth $200 to him! But, like most persons, he supposed *he understood all about farming*, and it was not until he had expended $600, and suffered two years' delay, that he felt compelled to refer to those who had made the special improvements he had in view, a practice, and a study.

This illustrates the whole matter, and notwithstanding you are "past the meridian of life," if you wish to drain and bring into cultivation your "spruce swamp," or that "large tract of flat land with white sand at the bottom, seven miles from the sea-shore," we advise you to call upon some candid person of experience to examine it, and give you the benefit of his judgment, and if he charges you $10 for his day's labor, you will be quite likely to save more than ten times that sum for the outlay.

It *seems* to us, that you have the means of making your old age glad with competence, and that your "sons may be as plants grown up in their youth," to comfort your declining years. That flat land, with white sand at bottom, is probably just what the cranberry requires. Try a small piece of it by clearing off all vegetation, and set the best native plants you can find about you as soon as you can work the ground this spring. Set the plants in bunches of two or three, or more vines together, twelve inches apart, or even nearer, if you have time and patience; then do not allow a weed or spear of grass to grow among them. Try a square rod, if you have not made arrangements to do more, and the success, or want of success of this, will indicate whether you should do more.

With these "crumbs of comfort" we must leave you, and will add for the general reader, that the letter upon which we have been commenting, is one of a class of which we are receiving many, and which cause us some anxiety, because we have so little power of returning satisfactory replies. There are some branches of farming as yet very little understood, and before the farmer embarks upon them who has not had experience, he should call in the aid of some person who has, if he would make his operations pleasant and profitable. The true mode of cranberry culture is known to very few, merely because they have never given attention to the subject. A wise man will not risk his reputation and his money in an enterprise which he knows little or nothing about.

ANIMAL FOOD.—Dr. Hayes, in his "Arctic Boat Journey," reports that the Esquimaux live upon exclusively animal diet, their daily allowance of food being from twelve to fifteen pounds, about one-third of it being fat. The doctor states that he has seen an Esquimaux eat fully ten pounds of walrus flesh and blubber at a single meal, after a hunt, or when about to begin a difficult journey. This large consumption of hearty food is a great shield against the cold. White men in Arctic regions are continually craving a strong animal diet, and will drink the contents of an oil-kettle with evident relish. A choice Esquimaux lunch consists of raw birds washed down with oil; the great luxury of the tribe is a soup made by boiling together blood, oil and seal meat.

For the New England Farmer.

ON PRUNING APPLE TREES.

MR. EDITOR:—Having been an attentive reader of agricultural papers, I notice that many people are in doubt when and how to prune their apple trees. Some say the fall, others spring, but many recommend the summer, while most trim in spring.

I wish to ask you, and through you, the readers of the *Farmer*, why you prune at all, (I mean after the tree has been set six to ten years, and begins to bear fruit?) Is nature at fault in growth and formation of the tree, or is the fault somewhere else? Of what possible benefit can it be to rob a tree or plant of its leaves or lungs? I am in doubt whether this generally prevalent desire to cut, saw, scrape, and wash apple trees, is an acquired one, or whether it is instinct, as in the hawk to eat the bird, or dog to bite the cat; but certainly we cannot ride in the cars, or along the highways, without seeing orchards whose owners seem to have the same ideal for a shaved and cropped tree, that the fancy have for a shaved and cropped horse or dog, and the limbs of the trees, after they have righted nature a little, resemble as many dogs' tails with a tuft at the extremity.

We will suppose the proprietor of an orchard about to commence upon a thrifty tree with a compact head; he thinks a moment, can it be that there is too much leaf or branch? Would it not be beneficial in the hot and scalding days of July and August, to have the trunk and limbs protected by a dense foliage? He also recollected of hearing Farmer Thrifty's old gardener say that a tree breathed through its leaves, and that the leaves are to the tree, what the lungs are to the animal, to purify and vitalize the "river of life." Now it so happened that Captain Cut-and-slash had an orchard adjoining his, that had been pruned after the fashion of the times, and he thought he would wait and see the result. In a year or two, he observed that the captain's trees began to have moss on them, they did not grow as formerly; some of the limbs died out, and what did not, had black spots upon many of them, and by cutting into the black, dead bark, he could discover white worms there. Farmer Thrifty was called; he said his trees did the same when he pruned heavily, but since he had left off, his trees did better, bore quicker, and more perfect fruit. He said the tree being robbed of its lungs, was unable to elaborate its sap; it became sour, bitter, poisonous—decay and death were the result. He termed it "consumption."

Now, Mr. Editor, my experience has taught me, that to remove limbs in spring time, before the leaf has started, is entirely and altogether wrong, and also any time after the tree has begun to fruit, to remove to any amount is injurious: better plow, and manure rightly, remove the dead wood, and leave nature to do the rest. H.

Bedford, Mass., 1860.

SANDCRACKS IN HORSES.—The following recipe for sandcracks I have used for many years with uniform success: Common tar, honey, elder ointment, (equal portions,) to be rubbed in between the hair and the hoof, twice a week, or oftener, if necessary.—*London Field.*

For the New England Farmer.

IS FARMING PROFITABLE?

This question is worthy of all the consideration which it has received in the able articles published in your columns, and naturally leads to others equally important. That agriculture is profitable, the results of particular crops have been relied upon as proving the affirmative, while it is well known that a farmer may raise seventy-five bushels of Indian corn per acre, and have many acres of it, and yet the same year lose a fruit crop, worth three times his corn crop; so with his other crops.

In the latter days of Mr. Jefferson, it was proposed to obtain an act of the Legislative Assembly of Virginia, by which his property might be disposed of by a lottery, to extricate him from debts incurred by his generous hospitality, in entertaining almost daily a great number of distinguished guests, foreign and domestic. An objection was made to this project, that it savored of gambling, and was derogatory to the fame and incompatible with the dignity of the Ex-president. This probably prompted Mr. Jefferson to write his essay on gambling, in which he says "that the farmer is the greatest of all gamblers." A quarter of a century ago, when I first read this essay, the remark was not particularly noticeable, but much subsequent reflection, and some little observation, have convinced me, that this remark, as most others of this great man, contains more truth than poetry.

I do not believe that farming in Massachusetts is a profitable business compared with other pursuits. Farming is a term that admits of many definitions, varying according to the systems of particular localities, climate, soil, &c., &c. I use it as applying to the cultivation of every thing raised in this State, and farming is generally profitable according to climate, natural fertility of the soil, facility of production, the price of land and labor, taxes, competition in the market, and the style of living and doing business, demanded by the imperious decrees of fashion.

Now, is farming a game of chance as declared by Mr. Jefferson, or is it a pursuit in which a man can make as definite calculations of expenses and results as are made in the sister arts? Must the mass of farmers live as cheap as they can, and trust to God, for the result of their labor? The painter, if he is master of his business, knows the exact cost of his paints, the quantity necessary to cover a square yard, the number of yards to be covered, the cost of laying on the paint, the margin of his profits, which his capital will return, and how often he can turn it; the mason, the number of bricks necessary for a given wall, the time required to lay them, the cost of labor, and the exact result of his operation; the carpenter, the quantity of lumber necessary for a given structure, &c. So it is in regular and legitimate trade and commerce, with the advantage of insurance against shipwreck, &c., while the farmer, in the failure of crops, must seek his insurance in the declaration that "while the earth remaineth, seed time and harvest shall never fail."

In the sister arts generally, skill, sound judgment, experience, and definite calculations, are not the sport of chance, but accomplish their purposes with almost as much certainty as instinct attains its ends.

How is it now with the farmer? Can he, when he plants his potatoes, or his orchard, with the greatest skill and judgment, tell anything about the result? Can he hasten the completion of his job, prevent drouth or rain, frost or the rot? These are things over which he has no control, but things controlled by a power before which his puny wit must bow, his boasted skill and science become foolishness, and as fruitless as an iceberg. Now let a general farmer cultivate all the crops; in no season will more than half of them be successful in Massachusetts. The rot may strike his potatoes, his carrot seed may not vegetate, his corn may fail, his turnip seed, sowed the 25th of July, wet or dry, may not sprout till frost comes, his grass land, stocked down with great skill and care, may fail in various ways, and in no season are but a few of the carefully calculated results realized. Man sows, but God gives the increase. Hence that strange faith so characteristic of the farmer.

Does any such uncertainty as this attend the sister arts? Can any business in which man's best faculties are thus baffled and contracted, (other things being equal,) be compared with this, where the operator may be master both of the inception and result of his labor?

That Indian corn may be raised for fifty cents a bushel, or is more profitable than other crops, does not prove agriculture, in general, profitable, for the character of the soil limits the number of acres which can be planted, and admitting that a farmer may raise 100 bushels per acre, the same season in which he does this, his loss from the failure of his oats, rye, barley, potatoes, hay or fruit, may be three times the value of his corn crop.

That agriculture is unprofitable, compared with other business in Massachusetts, is the practical judgment of farmers generally, deny it as you may, gloss it over as you will; else why do so many of their sons desert the plow, hardly enough remaining at home to take care of the good old fathers and mothers? Have they not seen their fathers and neighbors, hard-working and frugal, farmers till sixty years of age, still relatively poor, while their relatives and equals who have engaged in other pursuits are rich, clad in fine linen, and fare sumptuously every day, with leisure to enjoy life, with means to purchase its pleasures, and comforts, too? Why are farmers willing, even desirous, to have their sons quit the farm, and seek an easier and shorter road to fortune and happiness, than they have trod?

The truth must be told, they desire a better life for their children than they have had, and sigh for the means to put them into a position to attain it.

The inevitable conclusion to be drawn from this general desertion of agriculture is, that farming is unprofitable. The almighty dollar is the moving principle, the stepping stone to command the blessings of life, and not the avoidance of hard work, but work that does not pay; the condition of eminent success in all the arts, is honest hard work, indomitable labor with the head and hands united. There is no other potent to success. Farming is the most delightful of all occupations, where it can be pursued for its unalloyed pleasures, and not for its dubious profits.

Perhaps God, when he ordained that man

should earn his bread by the sweat of his brow, designed to protect him from the dangers of excessive wealth, from that effeminancy and deterioration consequent upon self-indulgence and sloth and from that debasing slavery to avarice which grows with the power and facility of accumulation.

I admit that a man can live by farming, but how does he live? how does he dress? what are his pleasures? when has he leisure? at what age can he retire from business, and live at ease with dignity upon the fruits of his labor? How often can he go to the White Hills, to Saratoga? when can he visit the battle-fields of his fathers, or the monuments of their fame, with his family, and have his business support it? Trips to Europe, or even to the national capitol—can he make them?

Yes, a man can live in Massachusetts by farming, but only by economy and self-denial, unknown and unpracticed in other pursuits. Take a survey of any common country town; who are the rich? Men that live, and not stay on the earth. They are men who have done something collateral to farming, traded, shaved notes, lumbered, &c. True, there is now and then a man with the strength and constitution of a giant, with a Yankee wife to match him, with mind enough to have been a Webster, with a will like Napoleon's, who by working sixteen hours a day in cultivating the earth, and selling its products, has made a few thousand dollars, but this man is an exception. In commerce, he would have been an Astor or Girard; in manufactures, an Abbot Lawrence; in science, a Morse, Humboldt, or a Stephenson; in law, a Mason or a Dexter; in the pulpit, a Channing; in letters, a Prescott or a Macauley, but he is obliged to be unknown to fame, and as untravelled as a Japanese.

Now, I know a very skilful farmer, who boasted that he made $1000 in 1856. One of his neighbors said that "he could prove that he lost $400." On being informed of it, he replied that "Mr. —— knows nothing." "I don't know about that," replied his friend. "Well, what was your investment?" "$10,000." "Well, the interest on that is $600. What was your wear and tear, which you have not calculated?" "About $350." "What was your own labor worth? The man who took your place on the market wagon has $500 a year; you have earned as much. Set this down at $500. Well, your wife has worked hard, kept no girl, and has done all the work in your great family of hired men; had she worked as hard for others, two or three dollars a week would be considered little enough. Set her work down at $150. Now, how does your account stand?

Interest on investment	$600,00
Your labor	500,00
Wear and tear	350,00
Wife's work	150,00
	$1600,00
Offset improvements	250,00
	$1350,00

"Had you not gone on to the farm, you might have had $1,350. Instead of which, you have but $1000, and a net loss of $350."

Take a survey of farmers generally in this State. Have they doubled their property in twenty years? Certainly not. Then they have not made six per cent. on their investments, and all their labor is lost. Well, they have reared families. What of that? All the members of their families have done work enough to have commanded in other pursuits much more than a living.

Again, compare men of like ability and habits engaged in farming and the sister arts, and what is the result? I know two brothers of equal education, (not an uncommon case;) the superior of the two inherited the homestead, the other went into trade in Boston and inherited nothing. They are both well off. The farmer is worth $25,000, and the other $150,000, and has not done a quarter part as much hard work. Just such was the case with their father and uncle. Now the farmer, by his mere skill and labor in other pursuits, might have been worth $30,000, for his equals in the vicinity have done it in the sister arts,—masons, carpenters, overseers and traders. I compare equals in habits and integrity.

These facts and results are confirmed by general observation, and are too true to be overlooked, and naturally lead to the inquiry, why is not farming in this State as profitable as the sister arts, and what can be done to make agriculture (the nursing mother of all true greatness, and the most noble, elevating and pleasant of all human pursuits,) as profitable as other business?

H. C. MERRIAM.

LUMBERMEN'S CAMPS.

The editor of the Ellsworth *American*, having recently visited the Maine lumbermen in their backwoods camps, gives the following description of their winter habitations:

"The camps of these hardy and laborious men are made of logs, and covered with "splits," which are long shingles, made of cedar, and rived and shaved. These are again covered with boughs. In the centre of the camp is the fire, extending half its length, with an open space just as large in the roof, for the escape of the smoke. A modern improvement has been introduced—the fire dogs, or andirons. These are made from three to four feet long, with a foot in the centre, and large enough to hold a large quantity of wood. They are really a pair of these indispensable articles welded together, with one foot in the centre to strengthen the double-headed 'fire-dog.' One of the luxuries of camp life is to sit on the 'deacon seat' and watch the flames as they issue forth from the hard wood fire, the product of numberless long and large sticks of wood, big enough for an old-fashioned 'back log.' The 'deacon seats' are sticks of timber, hewn and squared, and placed parallel with the fire, and on each side of it, for seats. Back of these seats, are the dormitory apartments. A good foundation is made with cedar or spruce boughs, on which are spread, as covering, a number of 'comforters' made thick and warm with cotton batting.

One of the curiosities of these habitations, is the 'bean oven.' This is a hole excavated at one end of the fire, and near the fire-dog, in which, after being sufficiently well heated with coals, is placed a large iron pot filled with beans, having a sheet iron covering jutting over the outer rim, and down its sides, to keep the ashes out. This is

covered all over with coals and hot embers, and left to cook through the night while the men are sleeping. In the morning the 'pot of beans' is taken from its bed, and the beans are on the table for breakfast, steaming and inviting enough to tempt an epicure. One of these camps had a dining and cooking-room, in addition to the usual accommodations, and also a good sized cook stove. There are, generally, from fifteen to twenty men to each camp. In all that we visited, quietness, order, industry, and the best of feeling, existed among the inmates."

EXTRACTS AND REPLIES.

WATER PIPES.

In the perusal of your highly valuable paper of the 28th inst. I noticed an inquiry made in relation to what kind of pipe is the best for conveying water, and also where it can be obtained? My experience in the matter has been, that after the water had remained in lead pipes for a time it became unpalatable and unfit for use. I next used the so-called block tin, but in a very short time it was crushed and in quite a leaky condition. I was then advised to adopt cast iron pipe lined with glass, but on considering the matter, thought it not best to do so, as the earth is liable to settle upon the glass and break it; I am now using the galvanized wrought iron pipes introduced by Mr. Norton, 74 Sudbury St., Boston.

Medford, Mass., 1860. SUBSCRIBER.

LARGE DRUMHEAD CABBAGE.

I wish to get some information through the *Farmer*, as to how I shall manage towards raising large Drumhead cabbages? For the past two years I have attempted to raise a large quantity of cabbages—especially for winter use. Our market requires a large and sound cabbage, but those I have raised did not head so well as many I have seen in Boston market, which are brought from Marblehead or from that vicinity. Our soil here is dark loam with a clay subsoil—naturally a very strong soil.

I would like some information as to the best method of preparing the land, the kind of manure that is best, what kind of seed, and whether it is best to use plants or plant the seed? I hope some of the readers of the *Farmer* will give me the necessary information, and oblige

Dover, N. H., 1860. AN OLD SUBSCRIBER.

FOWLS PLUCKING EACH OTHER.

I wish to inquire if you, or any of your readers, can give a reason for hens plucking feathers from each other and eating them? I saw some half dozen hens a short time since stripped nearly naked by their companions; the hens have been changed several times, but when they come on that particular farm, they are at once stripped. If you, or any of your readers, will inform me what causes this, and how it can be prevented, you will oblige A READER.

Hawley, Mass., 1860.

REMARKS.—We have noticed this among particular fowls, but never knew it to extend itself through the whole yard. What the special cause, or remedy is, we are not able to say.

"FATAL DISEASE AMONG CATTLE."

In a recent number of the *Farmer* I noticed a communication under this head, stating the loss to Winthrop W. Chenery, Esq., of many fine cattle within the past six months, by inflammation of the lungs. It said, "the last cow that died was the largest animal in the United State, weighing 3,260 lbs." Our friends here doubt this claimed weight, and our oldest inhabitants say "it 'aint possible." May I ask if there is not some mistake in the figures? A SUBSCRIBER.

Pepperell, Mass., Feb. 15, 1860.

REMARKS.—All we know of the matter is the *Boston Evening Transcript*, good authority, states that at five years old she was "weighed at Brighton, and weighed 3,260 lbs." Dr. DADD, on Diseases of Cattle, page 394, says the same.

PEARS FOR ORCHARD CULTURE.

I wish to learn the best variety of pears for general orchard culture adapted to the western section of Worcester county, and what varieties and proportions in a lot of fifty trees or upwards? I wish to be informed by practical fruit-growers.

Can any person explain through the *Farmer* the cause of apple trees blossoming three or four times in a season, as I have two trees of the August Sweeting which have blossomed four times in 1858, and three times in 1859.

OBSERVER ON THE FARM.

Oakham, Feb. 15, 1860.

CLUB-FOOTED CABBAGES.

I noticed in the last *Farmer* an article in regard to club-footed cabbages. My opinion has led me to the conclusion that a piece of ground used a number of years will cause cabbages to be club-footed, whether the land is moist or dry; but by the use of salt spread on before and after the cabbages are set out, it will prevent it. I have tried this way, and am satisfied that the use of salt is a sure remedy. They always do the best by using salt, if there is no danger of the club-foot. R. WASHBURN.

East Freetown, 1860.

CURE FOR GARGET.

While the cows are dry in the winter, give them a table spoonful of sulphur in salt three or four times. I have found that some cows will not eat it in salt, so I generally give it in meal. I have never known it to fail. W. I. SIMONDS.

Roxbury, Feb., 1860.

CURE FOR SCRATCHES.

Take one quart of chamber lye, and one-half pint of soft soap; mix them well together, and apply the mixture to the sore, using a corn cob to apply it. It must be applied once in three days.

Andover, 1860. A SUBSCRIBER.

A FINE SPANISH MERINO LAMB.

Mr. Henry W. Hammond, of Middlebury, Vt., sold a Spanish Merino buck lamb, 11 months old, to Mr. McFarland, of Washington, Pa., for $600.

Middlebury, Vt., Feb., 1860. W. C. H.

For the New England Farmer.

FARM FENCES.

Until the farmers of this country choose to adopt the system that prevailed in the early ages of the world, upon the plains of Judea, "where shepherds watched their flocks by night," fences will be considered a thing of necessity. Their existence in some form, all over the country, and the legislative enactments of the several States in regard to them, confirm and establish the fact that they are so considered. The safety of our flocks and herds, the protection of our orchards, of our door-yards and fields of waving grain, and of our cemeteries, and in some cases, even our forests, cannot be accomplished without them.

They are not only of absolute necessity, but of almost incalculable cost. A distinguished writer upon national wealth says: "Strange as it may seem, the greatest investment in this country, the most costly production of human industry, are the common fences which enclose and divide the fields. No man dreams that when compared to these unpretending monuments of human art, our cities and our towns, with all their wealth, are left far behind." A few years since, Mr. Biddle, in an address before an agricultural society, stated that the cost of the fences of Pennsylvania amounted to $100,000,000, and their annual expense, to $10,000,000. During a discussion at the farmers' club of the American Institute, a few months since, it was also stated that the fences of New York cost $67,000,000, allowing the farms to be divided into fields of 20 acres each; a much greater area than the fields of New England farms contain. Add to this their cost in 30 more States, and we shall have an amount almost beyond belief. They have not only cost millions upon millions of dollars, but, as a general thing all over the country, they are poor and wretched in the extreme; literally "a disgrace to civilization and the age."

Nothing that pertains to the farm has been so much neglected, and in no one thing is there room for so much improvement as in the construction of fences. Broken down stone walls, with scarcely "one stone left upon another," tottering, dilapidated posts and board fences, with the posts tipping hither and thither, the sport of winds and unruly cattle, meet the eye almost wherever we go. I am aware that it is an easier matter to write them down than to *right* them up; but if anything can be done to call the attention of that large class of intelligent men to the subject who read the *Farmer*, much, in the way of improvement, may be expected. Any improvement in this matter would not only be of great individual advantage, but a public and national benefit. Thousands of our young men, sons of farmers, disheartened and discouraged by the sight of rickety fences, and the labor of perpetual repairs, are driven from the farms to California, to Pike's Peak, or, perhaps, in some cases, worse still for the community, into the professions.

It may be said that poor fences not only cause great destruction of property by unruly cattle, but are the cause of more hard feelings between neighbors, more trouble, anxiety, curses, imprecations and vexatious lawsuits, than all else connected with the farm beside.

What can add more to the appearance of a beautiful field waving with rich harvests, than a neat, straight, substantial and durable fence? Well-arranged and tasteful buildings, with such a fence by the road-side, ornamented with rows of the sugar maple, with the birds of spring singing in their branches, would make many a dweller in the cities sigh for a country home, and many a farmer happier where he is.

Of the kinds of fences in general use, and considered by farmers the best, are post and rail, or post and board fences, stone wall, the Virginia fence, and hedge, or live fences. These are considered the best, and in the end more economical than those of a more frail and perishable character. Posts of chestnut or cedar in some soils are found to be durable, but in sandy soils soon decay, and on clayey, heavy soils are speedily thrown out of the ground by the action of the frost. In soils of this description they soon manifest an inclination "to rise in the world," and require great trouble and expense to keep them down.

Stone wall fences, from time immemorial, have been considered the very best, to question which, even now, might subject one to "sharper strikes" and severer criticisms, than have beset our doubting friend, Mr. Pinkham.

In some situations, and on some soils, when of moderate dimensions, this is unquestionably a good fence; but it is often otherwise. All will admit that is an expensive one to build. Other objections are, it requires something more than the wall to stop sheep; it takes up a great deal of land, and it is the poorest of all fences except stone post fence upon heaving soils. I have seen a wall which cost not less than $1,50 per rod, so thrown out of shape by the frosts of a single winter, that some parts of it required to be rebuilt to make it a good fence. Farmers say we build our wall fences broad and high, to get rid of the stone. But when you divide your cultivated lands into small and inconvenient fields, and inclose them with wide wall fences, are you rid of the rocks any more than you would be were they piled in the centre of those fields? Inclose an acre of ground with a four foot wall, and see how much there is left for the sun to shine upon.

Next comes the Virginia fence. Admirers of the "wavy line" for a farm fence, can say in truth that this fence will stand on heaving ground; and I am almost willing to admit that it may be sometimes better to *stand very crooked* than not to stand at all! Upon the thousands of acres of very valuable clayey soils, this fence alone, except one not much in use, is found to keep its position, while the frost keeps up a sort of "irrepressible conflict" with other fences which soon ruins them. My objections to this fence are the great amount of material it takes to build it, and the great breadth of land it puts beyond the reach of the plow, the harrow and the mowing machine. It usually takes about double the lumber for a length of it, and one-third more lengths than a straight fence of posts and rails, and upon both sides of it about three-quarters of a rod of land in width, which no farmer can well spare from his cultivated fields.

Live fences, or hedges, require much care in rearing them, and also take up much land.

These are some of the objections to the fences now in use. The question arises, can we have better ones, and how shall it be done? Would

it not be well for State Agricultural Societies to offer liberal premiums, (open to citizens of other States,) for specimens of the best kinds of new fences to be erected upon their fair grounds? Would not this stimulate our mechanics and farmers to make as much improvement in this matter, as has been made within a short time, in our agricultural implements, in the breeds of our cattle, or the productions of the soil?

C. B. SMITH.

Haverhill, N. H., Feb. 21, 1860.

REMARKS.—Our correspondent has our thanks for calling attention to this very important subject. It is evident that he has given it thought, and we trust he will follow this communication with suggestions as to the best size of fields on farms of fifty, and those of one hundred or more acres, and also show the extent of land occupied, per rod, by walls of different widths, supposing they were brought into a square. The whole subject needs more attention than has yet been given it.

For the New England Farmer.

PRODUCTION AND SALE OF MILK.

MR. EDITOR:—I have a word to say about the milk business, and the manner in which it is conducted at the present time. For the past two years, the trade has been much depressed, owing, (as is believed) to mismanagement. At times, milk is so short, the collectors are obliged to run around the adjoining towns, paying extra prices for it; and again so plenty, it cannot all be received, obliging many raisers to keep a part at home, or decrease, by withholding feed from the cow. The price paid to farmers has not been a living one, and therefore they were indifferent about keeping a uniform quantity. The *law*, as regards adulteration, is a dead letter, and plenty of milk in the cities is manufactured to order, as is reported from authority. Let the consumers know that they are buying a pure and unadulterated article, and nearly twice the amount would be used. The business of raising must be sustained by responsible people that will carry their quantity through May and July, those being the most difficult months in summer.

Farmers are willing to meet the retailers halfway. Give them a living price, say they, three cents per quart in summer, and four cents in winter, (or from October to April,) and the supply shall be regulated by the demand. It never can be managed in peace under the present system. Let them agree to keep up their quantity from April to October, or no sales. Plenty of men are now ready to make such contracts at a fair price, because they are satisfied that this is their only remedy. Is it right, and just, that the neighbor who takes no pains in keeping his quantity even, but makes it to suit his own convenience, (say an extra quantity in June, or in the height of feed,) should crowd those off the track that are disposed to do the right thing? Such is the case in this town, and in others on the line of this railroad.

E. WOOD, JR.

Concord, Mass., March 6, 1860.

For the New England Farmer.

PROFIT OF AN OAT AND FLAX CROP.

As an offset to Mr. Pinkham's unprofitable farming, I will give a little of my experience in that line, with rather a different result from his corn experiment. I raised 11 acres of oats, of which the following is an accurate account, (omitting dates:)

OAT CROP—11 ACRES.	Dr.
To 1 man and team, 7½ days' plowing, at $3	$22,50
To 33 bushels of seed, at 56 cents	18,41
To 1 man, 1 day sowing	1,00
To 1 man and team, harrowing 2½ days, at $3	7,50
To 600 lbs. plaster, $1,80, and sowing the same, ½ day	2,55
To 1 man, cradling 3 days, at $1,50	4.50
To 3 men, raking and binding 1½ day, at $1,50	5,62
To 2 men and team drawing in the barn, 1 day	5,00
To threshing and cleaning 517 bush. of oats, at 6c ₩ bush.	31,02
To marketing	2,00
To interest, taxes, rents of buildings, wear and tear of tools, &c.	44,00
Making the total cost of 11 acres of oats	$144,10

OAT CROP—11 ACRES.	Cr.
By 517 bushels of oats, at 45 cents	$232,65
By straw, worth $2,50 per acre for fodder	27,50
Total	260,15
From which deduct	144,10
Which leaves	$116,05

as clear profit on 11 acres, and $10,55 profit on the acre, which is a trifle over 21 per cent. on the capital invested in the land, allowing it to be worth $50 per acre. I charge nothing to this crop for manure, as there was none put on to that or the preceding one.

The crop that pays the best with farmers in this section the present year is flax, which is a better crop than for several years past, and my own was the best crop I ever raised, but some of my neighbors have beat me considerable this year.

I stated in a former article that my profits on flax would be about $23 per acre, in which I was mistaken, as I had not footed up my account, only merely run it over at that time, and a mistake in the figures when rectified, made a great difference with the result, greatly to the disadvantage of the theory of those who think farming an up-hill business.

FLAX FIELD—3 ACRES.	Dr.
To 1 man and team plowing 2 days, $3	$6,00
To 1 man and team harrowing 1 day	3,00
To 3 bushels seed, $1,50 per bushel, and sowing the same, ½ day	5,00
To 3 bushels ashes, 3 hundred of plaster, and sowing	1,87
To pulling at $6 per acre	18,00
To whipping of seed, 2 men with 1 horse power and rollers 1 day	4,00
To spreading, 1 man, 3 days	3,00
To turning, 1 man, 1 day	1,00
To taking up and binding, 2 men, 1 day	2,00
To drawing to mill, 2 men and team ½ day	1,50
To dressing 1236 lbs. flax at 2½c per lb	30,90
To cleaning and marketing 36 bushels of seed, 2 men 1 day	2,50
To interest, taxes, rents, &c.	12,00
Total cost	$90,77

FLAX FIELD—3 ACRES.	Cr.
By 1236 lbs. flax, at 14c per lb	$173,04
By 36 bushels seed, at $1,37½	49,50
Total receipts	$222,54
Deduct	90,77
Balance	$131,77

Thus it will be seen that I have made a profit of $43,92 on the acre, which is only a trifle short of 100 per cent. on the money invested, besides allowing a living price for my labor.

Oak Hill, N. Y. INVESTIGATOR.

FOUR MORE OF THE GRASSES.

In accordance with an intention expressed in our last number, we now present the reader with engravings and brief descriptions of four more of the grasses that may be profitably cultivated on our New England farms, and three of which are already quite common. The cuts and descriptions we are permitted to use by Mr. Secretary FLINT, as they were given in his recent work on "*Grasses and Forage Plants.*"

If these illustrations are preserved, they will enable those who are not acquainted with the various grasses, to determine the names of some, perhaps, already growing in their fields.

THE MEADOW FESCUE GRASS.

This is an excellent pasture grass forming a very considerable portion of the turf of old pastures and fields, and is more extensively propagated and diffused by the fact that it ripens its seed before most other grasses are cut, and sheds them to spring up and cover the ground. Its long and tender leaves are much relished by cattle. It is never or rarely sown in this country, notwithstanding its great and acknowledged value as a pasture grass. If sown at all, it should be in mixture with other grasses, as orchard grass, rye grass, or common spear grass. It is of much greater value at the time of flowering than when the seed is ripe. It is said to lose a little over fifty per cent. of its weight in drying for hay.

MEADOW FOXTAIL.

This is a valuable grass for pastures, on account of its early and rapid growth, and of its being greatly relished by stock of all kinds. The stems and leaves are too few and light to make it so desirable as a field crop. It thrives best on a rich, moist, strong soil, and the quantity of its nutritive matter when raised on such soils is considerably greater than on sandy soils. As a pasture grass, its luxuriant aftermath, being in value nearly one-fourth greater than its first spring growth, recommends it still more highly. In this respect it is superior to Timothy, the aftermath of which is generally but slight. For lands designed to be laid down to permanent pasture, it will make a prominent part of the seed. Where it occurs in fields, it loses largely its nutritive value if cut in the blossom. It does not acquire its full perfection and hold of the soil until three or four years after being sown. The aftermath exceeds the flowering crop in quantity as well as in nutritive matter. The grass loses seventy per cent. of its weight in drying, and the hay contains about sixty-seven hundredths per cent. of nitrogen.

Meadow Foxtail. Timothy, or Herds-Grass.

The seed of meadow fox-tail is covered with the husks of the flower, soft and woolly, while the larger valve is furnished with an awn. There are

five pounds of seed in a bushel, and 76,000 seeds in an ounce.

GREEN MEADOW GRASS, JUNE GRASS, COMMON SPEAR GRASS, KENTUCKY BLUE GRASS.

This is an early grass, very common on the soils of New England in pastures and fields, constituting a considerable portion of the turf. It varies very much in size and appearance, according to the soil on which it grows. In Kentucky it is universally known as Blue grass, and elsewhere frequently called Kentucky Blue grass, and still more frequently, June grass. It comes into the soil in some parts of the country when left to itself, and grows luxuriantly on soils best suited to it, and is relished by all cattle. Its creeping root is said by some to impoverish the soil. Wherever it is intended for hay it is cut at the time of flowering, as if the seed is allowed to ripen, more than a fourth part of the crop is lost. In its earliness, it is equalled by some of the other grasses, and in its nutritive constituents by several. After being cut in summer it starts up slowly. It grows well in rather a dry soil, but will grow on a variety of soils, from the dryest knolls to a wet meadow. It does not withstand our severe droughts as well as some other grasses.

TIMOTHY, OR HERDS-GRASS.

As a crop to cut for hay it is probably unsurpassed by any other grass now cultivated. Although somewhat coarse and hard, especially if allowed to ripen its seed, yet if cut in the blossom, or directly after, it is greatly relished by all kinds of stock, and especially so by horses, while it possesses a large percentage of nutritive matter in comparison with other agricultural grasses. It is often sown with clover, but the best practical farmers are beginning to discontinue this practice, on account of the different times of blossoming of the two crops. Timothy being invariably later than clover, the former must be cut too green, before blossoming, when the loss is great by shrinkage, and when the nutritive matter is considerably less than at a little later period, or the clover must stand too long, when there is an equally serious loss of nutritious matter in that. It thrives best on moist, peaty or loamy soils of medium tenacity, and is not suited to sandy or light gravelly lands; for though on such soils, by great care, it can be made to grow and produce fair crops, some other grasses are better suited to them, and more profitable. It grows very readily and yields very large crops on favorable soils. I have known instances where its yield was four tons to the acre of the best quality of hay, the Timothy constituting the bulk of the grass. It is cultivated with ease, and yields a large quantity of seed to the acre, varying from ten to thirty bushels on rich soils.

For the New England Farmer.

PIPE FOR CONDUCTING WATER.

Mr. Editor:—In the *Farmer* of January 28th, "A Reader" asks some questions with regard to the best pipe for conveying hard water from a well twenty feet deep to a pump about one hundred feet distant on a level. He also states that were the water soft he should put in lead pipe.

As I have seen no proper reply to this communication in your columns, I will venture a few words, hoping they may be of use to your correspondent, and prevent him or others being led astray by his suppositions with regard to the dangerous effects of soft water on lead.

"A Reader" is mistaken in supposing that soft water is not injured by lead pipe through which it passes. The fact is quite the contrary. If rain water be kept in lead cisterns, or those lined with that metal, a white hydrated oxide of lead is formed at the surface of the water, where both air and water have access to the metal. This oxide is rapidly formed, it is soluble in the water, and exceedingly poisonous. The same effect takes place in a lead pipe conveying soft water, as there is always more or less air in the pipe.

But if the water contain even a small quantity of carbonic acid, the oxide above mentioned will be converted, as soon as formed, into carbonate of lead, which is insoluble in water, and combines with some other of the constituents of hard water to form a coating in the inside of the pipe, which

arrests the corrosion of the metal and the consequent contamination of the water.

Almost all spring and well water contains sufficient carbonic acid to render lead pipe free from deleterious effects upon the health of men or animals. Thus we see that the mere fact of water being hard must not be taken as evidence of its liability to injury by lead.

Presuming that the "twenty feet deep;" means from surface of ground to surfaces of water, the height of the pump must be added; making, say, twenty-five feet rise and one hundred feet horizontal, the distance that it is required to carry the water. To insure the pump being able to draw water this distance, it is necessary that the pipe should be air-tight, which throws glass or wood entirely out of the question. Glass may be laid tight, but it will not remain so. The only desirable materials appear to be either lead or iron. A gutta-percha pipe would be admirable, if sufficiently rigid to prevent its being "collapsed" or crushed together, so as to obstruct the passage of the water.

Were the case my own, if any doubt existed in my mind as to the quality of the water, I would use iron, which is comparatively cheap, durable, and perfectly harmless.

Theo. G. Ellis, *Civil Engineer.*

APRIL WORK.

The sun has come again with power, the days are longer, birds sing, buds swell, the dancing waters are musical in the valleys, while peeping flowers and springing grass invite us forth to breathe the sweet airs of the new-born year.

Thanks, for this change of the seasons! Each new *April* is a new era in life to the farmer. His general calculations have been made, to be sure; but they are not mathematical, to be worked up to like so many arbitrary rules. The farmer cannot do this. When the ground is laid bare before him, and the influences of the winter are revealed, he frequently finds it necessary to change the plans he had already decided upon. So that *April* often demands the principal engineering of the year.

Every implement and machine on the farm is in order,—is it? The cattle are lusty and strong; the seeds of every kind are selected and in their appropriate places, ready to be committed to the earth; the manures are in symmetrical heaps on the field, protected with a covering of muck or loam; refreshing rains have fallen, rich in ammonia, to fertilize the waiting soil, while the superincumbent atmosphere is ever ready to impart its oxygen, carbonic acid, nitrogen and other agents, whenever the soil is cooler than the air above it. So nature has made all fitting preparation on her part, all in good season for man to step forward to "dress the earth and keep it," for his pleasure and profit.

Plowing is one of the most important operations now,—but where the land is wet and sticky, even this prime work had better be delayed until the water has drained away, and the soil become aired and dried, so that when a furrow is turned a portion of it will fall to pieces. If it falls over flat, cold and heavy, it will remain a clog and incumbrance through the entire season, if at all of a clayey nature. Better to wait a little, and allow nature to perform her work in her own way. On thorough drained land there will be no difficulty in plowing as early as you desire.

Potatoes should be planted early, so as to come to an early market.

The Garden, by all means, should have attention now. Make a small patch of soil, *very rich*,—even if you are obliged to rob the corn or grain field a little,—work it deep and thoroughly, and then sow at proper times, all the seeds of the common vegetables,—such as beets, carrots, turnips, cabbage, onion, tomato, beans, peas, summer squash, egg-plant, parsnip, melon, cucumber, &c., &c. If these are well tended, they will pay four times the profit that any hay or grain field will.

A bed of *Asparagus* is essential—no farmer should do without it. Add, also, a few hills of rhubarb.

Be up in the morning, singing with the lark; keep all your work *before* you; never say, "*that ought to have been done yesterday;*" give prompt and kind attention to the stock, as they will catch and appreciate your sympathies, and abundantly repay them; do not allow any creature to break through a fence to begin the season with; keep cattle off the mowing land, and from browsing the young fruit trees, and start every thing decently and in order, and you will realize days of peace and nights of calm repose.

Transactions of the Middlesex Agricultural Society, for the Year 1859.—In this pamphlet of forty pages, we find the names of the officers elected at the annual meeting in September last, with the names of the members of the society; an account of the cattle show and exhibition at Concord, last fall, with a list of the premiums awarded; and the address delivered by the Rev. Rufus P. Stebbins, D. D., of Woburn. Mr. Stebbins has spent several years in the most fertile section of the West, and on his return to his native State, speaks words of encouragement and cheer to the farmers of "sterile" New England, that should be heard beyond the limits of Middlesex county. The matter and the manner of this publication are alike creditable to the society and its managers.

☞ If you invest money in tools, and then leave them exposed to the weather, it is the same as lending money to a spendthrift without security—a dead loss.

LEGISLATIVE AGRICULTURAL MEETING.

[Reported for the New England Farmer by Thos. Bradley.]

The eighth meeting of the session of the *Legislative Agricultural Society* was held in the Representatives' Hall at the State House, on Tuesday evening last. Hon. N. Eddy, of Oxford, occupied the chair, the subject for discussion being, "What are the best measures that our Agricultural Societies can adopt to satisfy the public conclusively which are the most profitable breeds of cattle for the farmers of New England to keep on their farms; 1, for the dairy; 2, for the yoke; 3, for the shambles?"

The chairman said he occupied his position unexpectedly, and was not conversant with the subject for discussion practically, yet he considered it one of the utmost importance to agriculturists. He thought that some breeds of cattle were good for dairy purposes that were not good for the others named, and thus it would be necessary to discuss the subject in this manner. The Ayrshires he considered, as did many others, as among the most profitable for dairy purposes, but that to put them into beef they paid but a small sum for the cost of feeding. Many considered the Durham breed as good, and he thought that where they had rich, heavy feed, as was got in the Connecticut Valley and the more fertile portions of our State, they might do well; yet with the feed to be had in three-fourths of our State, he felt satisfied they were not the best breed for farmers to raise. In his opinion, a cross between the Devon and Native would be found the best breed for the three purposes named in the question for discussion, over three-quarters of the territory in New England, as they were good milkers, hardy for the yoke, and, when well fatted, good for the shambles. He should recommend the improved Devon breed, or, as an equivalent, the best native breed, as including all the qualifications desired.

Mr. Asa Sheldon, of Wilmington, thought the subject one of the utmost importance, and said that he considered the milch cow of more importance than most people, but he would say that the majority of persons did not understand that milk, butter and cheese were not all a milch cow produced. After these, said he, we get a little pork, veal and skins, all made from the milk. There are 500 head of cattle butchered every day in Massachusetts, said the speaker, and the first $3 in each of these is made from milk, thus giving a product of $1500 a day from this source alone, and making it highly necessary that we should get the best cows. The State has been liberal to the various county societies, and the public, he thought, had a right to seek information from them, but the way they were going on he did not see that the people were likely to get it. Premiums are offered for the various breeds of cattle separately, Herefords, Durhams, Ayrshires, Devons, &c., &c., and the same encouragement is given to the breeder of the poorest as to him who exhibits the best breed.

He thought the only true way was to let all compete together on equal terms for the premium, and let the best cow take the highest premium, and then we should know what breed was the best and most profitable to raise. He compared the present method of awarding premiums for cattle to that of giving premiums for mowing machines, allowing the maker of each kind of machine to be considered as a class by himself. He concluded his remarks by expressing a hope that a resolve would be passed that all breeds of cattle should compete together, and on their merits. Foreign breeds, said he, are kept better than Natives, and unless we let them compete together we shall never be able to decide which should have the preference.

Col. Heard, of Wayland, differed from the previous speaker in the matter of separating the different breeds of cattle; he thought the great trouble among our farmers was, that they were too negligent in breeding stock—that when they get a good cow they don't pay the attention they should to the animal they select to raise by. If agricultural societies are going to ascertain which are the best breeds of cattle, they must be particular and keep them separate, and thus induce farmers to exercise care in getting the best animals from which to raise stock. He considered that there was nothing that kept our native stock down more than this negligence in selecting good blood. The Ayrshire and Alderney were considered the best cows for milk, and perhaps the latter for butter, and he considered this was entirely owing to keeping the blood pure, while if we could keep our own native stock up, we could, he felt assured, get them to be as profitable as the imported cattle. He spoke of the great necessity there was that agricultural societies should impress this matter of the selection of blood stock on farmers.

Mr. Gale, of Heath, said there was not this trouble in regard to the various kinds of cattle in Franklin county, as they had very few except of the Durham breed there. They found that the best and most profitable cattle they could keep were a grade from the Native to the Durham, as these were finely proportioned, good and hardy to work, kind and docile, and mature quickly, making good beef. As an idea of the size of the stock raised, he mentioned a pair of steers, owned by a neighbor of his, that were three years old this spring, which were called 3600 lbs. live weight. Most of the farmers in his section thought it decidedly better for their interest, not selling their

milk, but making butter and cheese, to cross the breed in the way mentioned, than to keep the imported breeds pure.

Hon. JOSIAH QUINCY, Jr., of Boston, said that at the great agricultural show at Paris, the greatest that ever took place in the world, the question was presented,—"what class of cattle were to be considered the very best, or the representative breed, for all purposes." The committee to decide this question was equally composed of English and French, the chairman having the casting vote, being a Frenchman. The French insisted that all three of the points, milk, yoke and shambles, should be considered in the award, while the English did not look at it in that light. He believed the matter was decided that it was necessary to look at the requirements of the animal, and what you wanted it for, in awarding the palm of excellence. He spoke of the interest manifested at the Paris exhibition, and mentioned the fact of $2500 being paid there for one cow. In a recent agricultural exhibition in Albany, Mr. Quincy said, he had seen what was said to be the best bull in England, the property of Col. Thorne, and for which he paid $5000 there. This was a Short-horn; and there was a singular incident connected with his purchase which he related as follows: Some years ago, Mr. Thorne commissioned his agent in England to purchase for him the very best bull in the country, as also a cow. The agent paid $5000 for the bull, and bought a cow which happened to be in calf. As she was near her time of calving he did not ship her until after the birth of the calf, and not desiring to send the weakly offspring, he shipped the cow alone, making a present of the calf to the man of whom he purchased the cow. In course of time the bull died, and Mr. Thorne announced the fact to his agent in England, at the same time commissioning him to buy another, also to be the best in the country. The agent went to work and selected an animal for which he paid, as before, $5000, and which, on investigation of pedigree, proved to be the very calf he had given away at the time of his former purchase for Mr. Thorne.

In Kentucky, where they had abundance of feed, Cassius M. Clay considered the Short-horns the most profitable breed to raise for the shambles, but in our own State, Mr. Quincy thought they were not so favorably looked upon. He thought that the Alderneys and Ayrshires were well deserving the attention of our farmers as producing milk, butter and cheese, and a cross from these might be found to answer the other requirements named.

He thought our native breeds of cattle were a good deal like some of our native American citizens, if you looked back to the grandfather, and in some cases to the father, you would find they came from "Ould Ireland." A good deal, said he, depends on feeding a cow, in the profit you can derive from her, and the use you can put her to, and this is a matter of weighty importance. He closed by relating in an amusing manner the controversy at the Paris show in the matter of awarding the first premium on hogs, showing that this was given to the French, on the ground that their hogs were able to take care of themselves in a great measure, while the English had to be taken care of.

Mr. HOWARD, of Boston, said that at the Paris show the premium for the best beef was awarded to the Scotch cattle, and the Durham Short-horn came the seventh in the award. He thought that if we looked at the comparative estimate in which the Short-horn is held in England, we should find it was much over-estimated here, as it was only in the richest parts of England they were kept. What is known here as the Herdbook family of Short-horns are not kept in England to any extent, and he had never seen one there. At the London show, the year before last, there were 150 cattle shown for dairy purposes, and last year a less number. Among these there were no Short-horns, no Devons, no Herefords, and last year only two of the latter. The contest was between grade Short-horns, grade Herefords, Jerseys and Welch. The South Devon breed, said he, is kept somewhat for dairy purposes, and on fair pasturage it is said to fat easy and to make good beef, and is considered as among the best for the shambles. Scotch is also considered good, and Herefords sell at about the same price. The Smithfield Club was formed, he said, about the commencement of the present century, whose object was to ascertain what breeds of cattle were the best, and could be raised at the least expense, and their plan of ascertaining this had been changed about five years since, when they concluded to make two sweepstakes, the prizes to be a valuable gold medal in each—one for cows and heifers, and the other for oxen and steers. In addition to this they gave prizes to the classes separately. This he thought was a good plan, and would work well with us, and he hoped to see it adopted.

Mr. FLINT, Secretary of the Board of Agriculture, said, in reply to the remarks of Mr. Sheldon, that at the last State Fair, held in Boston, separate premiums were offered for all breeds, including natives, also premiums for the best cows for milk purposes. He was not prepared to make any lengthy remarks on the question under discussion, but he saw a gentleman from North Brookfield present, and he thought it would interest the meeting to hear a statement from him in relation to the disease at present prevailing among cattle in his neighborhood.

Hon. FREEMAN WALKER, of North Brookfield,

then gave an account of the disease as it appeared among the cattle of Mr. Curtis Stoddard, of North Brookfield, from a calf he had purchased from Mr. W. W. Chenery, of Belmont, to its spread to New Braintree, and the death of some 25 head of cattle, and more being sick.

He said that great excitement existed in these towns and those surrounding, in consequence of the apparently infectious nature of the disease, and he urged immediate action to check it. He thought that the only means would be to destroy the cattle affected, and that this should be done at the expense of the State, as, if done by the towns, he was fearful the authorities might pursue a temporizing course. Money, he urged, should not be an object when there is a prospect of the disease, spreading over the whole State. He suggested that the Board of Agriculture might have charge of the matter, and take action as soon as possible. He hoped that economy in this case would not be allowed to cripple efficient legislation.

Dr. LORING, of Salem, spoke briefly of the disease now prevalent among cattle, and said that it was either in the pleura and stomach or in one or the other, and he did not see how it was to be decided by discussion. In discussing the question of the evening, we ought to consider what are the most important kinds of cattle to be introduced. Our necessity, said he, is for dairy purposes, and we must look at it in this light. He said he had recently visited a farm in Barre, a cheese-making farm, where 22 cows were kept, and he had never seen 22 cows on any farm in Massachusetts look so well. They were Short-horns or grades, and the owner said they did very well indeed. Before I left, said the speaker, he asked me if I could furnish him with a good Ayrshire bull, and on my asking him why he wanted it, he said his cows were too large for his dairy. Mr. Loring spoke at length of the good dairy qualities of the Ayrshire cattle, and said they had been bred expressly for the dairy. In this part of the State, said he, we want cattle of a moderate size, cheaply kept, and that yield a great profit for the feed consumed, and he contended that the Ayrshire was without doubt the very best for this.

Mr. HOWARD and Mr. FLINT both spoke of the importance of vigorous measures being taken to stop the disease among cattle, as now it is known to be confined to a small arena, while if prompt action is not had, it would be difficult to tell the results.

It was announced, that the subject for discussion, at the next meeting, on Monday evening, would be, *"What are the most profitable crops farmers can raise on Massachusetts farms?"*

PET BIRDS.—Caged birds are the source of much pleasure, and while they give great happiness if they are kept in good healthy condition, seem to enjoy life nearly, if not quite as well, as their mates in the bush or the wildwood—especially if, either from lack of memory, or from blissful ignorance, the caged birds do not know what pleasure they lose. "Where ignorance is bliss, 'tis folly to be wise." One of the great drawbacks to the happiness of birds, and to the pleasure of keeping them, is lice, and having recently learned of a safe and sure way of removing them, we give it to our readers. The *Michigan Farmer* says:

"Lay a piece of Canton or cotton flannel over the cage at night, several nights in succession, taking it off at daylight. Multitudes of the lice will be found upon it, which are easily killed. After a few days all will be removed. A case in which this was very successful, has just been brought to our notice; from a pair of bob-o-links hundreds of these parasites were removed in this way."

For the New England Farmer.

SELLING MILK COMPARED WITH MAKING BUTTER.

MR. BROWN:—As I am among the number of those who are not perfectly assured that they are getting rich by selling milk at the present prices paid to the farmer in Concord, I am naturally inclined to find some more profitable way to dispose of it, if possible. For the above reason, after reading Gov. Boutwell's statement in the *Farmer* of the 4th inst., and without any intention of sending them to you for publication, I was led to make some estimate on the subject, adapted to this locality, and for the whole year, instead of for the five months best adapted to butter-making. In the first place, I suppose the cans mentioned in the Governor's statement to be what we call eight-quart cans, as they contain about 2 pounds more milk than the seven-quart cans which I use.

The average price per can, of that size, for the last and present six months, in this place, is twenty-four cents, at the door. Now, I take a dairy which furnishes 8 cans of milk per day, or 2920 cans per year, from which I make the following calculation, viz.:

	Dr.	
To 2920 cans milk, at 24 cents	$700,80	
To making 2336 lbs. butter, at 5½ cents	128,48	$829,28
	Cr.	
By 2336 lbs. butter, at 24 cts. at the door	$560,64	
By skim milk from 2920 cans, at 8 cents	233,60	$794,24
Balance against butter		$35,04

It will be seen by the above, that I allow one and one-fourth cans of milk for one pound of butter; the Governor's average is one and twenty-seven-one hundredths.

Now let us carry the matter a little farther; I have allowed eight cents per can for the skim milk; now, as I have no market here for that article, except in the hog's trough, let us see if those customers will pay us the price that we have allowed the butter for it. In the first place, let me say, that I think no farmer will disagree with me in the statement, that a shoat taken at the weight of one hundred pounds, and kept one year, on an average daily allowance of one can of skim-milk and two quarts of corn meal, cannot be made to weigh more than four hundred pounds, and that ten loads of manure, worth one dollar, per load, is a

liberal allowance for one hog; and from these assumed facts, I make one more calculation, as follows, viz.:

	Dr.
To 8 shoats, weighing 100 lbs. each, 800 lbs., at 6c	$48,00
To 2020 cans skim-milk, at 8c	233,60
To 16 quarts meal per day, 182½ bushels, at $1	182,50
To carting loam, muck, &c.	10,00
	$474,10
	Cr.
By 3200 pounds pork, at 8 cents	$256,00
By 80 loads manure, at $1	80,00
	$336,00
Balance against hogs	$138,10
To which add balance against butter as above	35,04
Making the whole balance against butter-making	$173,14

From this I conclude that hogs will not pay 8 cents per can for skim-milk, and that however unprofitable milk-selling may be, butter-making must be more so. If any of your correspondents can show facts, or figures, to carry the balance to the other side of the account, no one will be more pleased to see them than a MILK-RAISER.

Concord, Mass., Feb. 11th, 1860.

FATAL DISEASE AMONG CATTLE.

The farmers of our Commonwealth, and, indeed, of New England, will learn with regret that a disease which threatens to prove as extensive and fatal as the cattle murrain of Europe, if, indeed, it be not the same malady, has made its appearance among the stock in North Brookfield and vicinity. The *Journal* gives the following account of its origin and spread, which is corroborated from other sources:

The disease was introduced last summer by a calf of foreign breed, brought from the town of Belmont. It fixes itself upon the lungs, and produces a violent cough, and the lungs are finally destroyed. Some of the cattle attacked with it linger along for weeks; others die in a few days after the attack. None have recovered.

Letters from farmers in North Brookfield say that the disease is apparently making a clean sweep through the herds in that section, where it has got a foothold. One man has lost ten head of cattle, and has as many more sick. Another man has lost seven, and the best of his herd are sick. In North Brookfield and New Braintree, the disease is in five or six herds.

One gentleman in North Brookfield writes to a member of the Legislature that the disease is of the most alarming character. The calf from Belmont was carried to Leonard Stoddard. His cattle began to be taken sick, and one after another died. He sold an animal to Mr. Olmstead, and the stock of the latter are all dying. Mr. Stoddard also sold a cow to Mr. Huntington, who has since lost seven cows, and has ten more sick; so of another herd in New Braintree, where some of Mr. Stoddard's stock were sent. If allowed to spread, continues the writer, the disease will cause general destruction. It is a foreign disease, and the same that prevails in Holland at this time. It seems almost certainly fatal.

Something effective should be done, otherwise it will spread all over the State. Oxen infected with it are now worked in the streets. This should be stopped. The selectmen ought to be authorized to forbid any person who has any imported stock from taking it out of his own premises, and to cause the immediate destruction of all sickly animals. A petition to the Legislature is now in circulation among the farmers in the western part of the State, or about to be put in circulation, to effect the purpose above expressed.

We learn that the disease has entered the herd of the gentleman in Belmont who sold the calf to Mr. Stoddard, and that his cattle are nearly all exterminated.

Persons whose cattle are infected are making anxious inquiries of the Secretary of the Board of Agriculture and others, with a view of ascertaining some remedy for a disease which threatens to depopulate the farm-yards of the Commonwealth.

It is a matter of the utmost importance that some preventive should be adopted, and seasonably. Notwithstanding veterinary authorities prescribe remedies—among which are the separation of the diseased animals from their companions, light and nutritious diet, relief of urgent symptoms, &c.—we hold that the only *sure and effectual safeguard* is the immediate slaughter of every animal which is infected. This course will entail considerable loss upon farmers, but we should advocate it, even if the State were to be called on to make good the loss; for a comparatively small expenditure, now, may not only prevent the spread of a loathsome and fatal disease, but also protect people from the possible evils of purchasing the carcases of the affected animals for food.

The contagious or infectious character of the disease would seem to be sufficiently established. *Morton's Cyclopædia of Agriculture*, an English work, states that

The term (pleuro-pneumonia) denotes inflammation not only of the substance of the lungs but also of the membrane which covers them, as well as that which lines the cavity of the chest. Post mortem examinations lead to the conclusion that the disease is of an inflammatory character. With regard to its infectious character a doubt can scarcely be entertained. It would seem to be evident that the disease is produced by an animal poison floating in the atmosphere, and in most cases proceeding from the respiratory surfaces of diseased animals.

This authority, under the head of "Treatment," suggests that in case a herd is large, and only one or two animals appear to be affected, it would be most prudent to slaughter them all at once and sell the beef of the healthy ones. We understand that a bill to this effect has been presented to the Legislature. If not, we hope that no time will be lost in passing a bill that shall embrace the above provision, and also forbid the driving of cattle from the infected region to market, until the disease shall have completely disappeared.

WILL WOOD OF THE FARM.

BY B. W. PEARCE.

The bright Spring days have come, Will Wood,
The cold, bleak weather is past,—
The husbandman speeds his plow once more,
The Frost King's gone at last.
The fields have cast their mantle of white,
And are donning their carpet of green,
The cattle e'en now, on the hill-side graze,
And the green bursting buds are seen.

My mind's eye wanders to the farm, Will Wood,
The farm with its meadows and trees,
Where in years gone by—bright boyhood's years—
Our hearts were light as the breeze.
The house by the road, where years it has stood,
Unscathed by the hand of decay—
The peach and the pear trees, 'neath whose shade,
We went in the sunshine to play.

The hand that planted them is cold, Will Wood,
And is laid 'neath the white marble stone;
But the trees he left bright monuments stand,
To tell of the patriarch gone.
That old well-sweep you've taken away,
And a "new-fangled" pump, in its stead,
Brings to your hand the pure cooling draught
From the well that our good sire made.

And don't you remember the oven, Will Wood,
We built 'neath the buttonwood tree?
And how in that oven the apples we baked,
And none were so happy as we?
A score of years have passed since then,
But the oven remains there still,
Though the soft, green moss now covers its sides,
That oven close under the hill.

There is one gentle voice now hushed, Will Wood,
That we all so delighted to hear;
Her form lies cold in the embrace of death,
That was wont the dwelling to cheer;
But her memory lives in the hearts of those
Who joyed in her presence then;
She'll mingle no more with the scenes of earth,
But anon we shall meet her again.

We're scattered all hither and yon, Will Wood,
We ne'er again shall meet,
Around the board in the old farm-house,
With kindly words to greet;
But our hearts cling fondly around that spot,
Where we never knew aught of harm,
And we joy to grasp thy hard, brown hand,
Will Wood of the homestead farm.

For the New England Farmer.

REARING AND FATTING GEESE.

MR. EDITOR:—As I have been in the business of raising geese for some twelve years, I will try to answer that lady whom you referred to, and also others who have inquired of me by private letters. I must confine myself to my own stock, as I am not much acquainted with other breeds. Mine are the pure Bremen, imported by Mr. James Sisson, of Warren, R. I.; they are of pure white; my gander now weighs 25 pounds, my two geese are some lighter; they lay the first of March; from 8 to 12 days before they commence laying they will refuse their allowance of grain, then I prepare nests for them under cover, where it is warm, and at sufficient distances so that they cannot hear other goslings. I place a false egg made of chalk, say about 2 inches in diameter, in the nest, and if they will own these nests, they will cover the nest egg up. Remove their new-laid eggs as soon as they are laid, so as to not let them chill—place them on the small end in a box with cotton wool, and keep them in a warm room until wanted. I don't allow the gander to go where the geese are sitting. They set from 28 to 30 days. As soon as I think there is a number out of the shell I put my hand under and remove all the shells, to give room for the rest. Do not be in a hurry about getting them out of the nest too soon—let nature have its way. Don't pick them out of the shell, except in some extreme case. Whenever you see the goslings crawling out from under the goose while setting, place a green sod snug to the goose; they will soon find it; then give them a little corn-meal wet up with sweet milk, if convenient, if not use water. Place a shallow dish of water near by, so that they can help themselves. Do not allow them to run out in the dew or in a storm while young. In about ten days they will take care of themselves by the aid of the goose. If there is no grass for them to feed on while very young, chop up some cabbage fine and mix it with their meal, for they must have something of that nature. Keep your goslings in separate flocks for two weeks before you turn them into one flock. Two geese to a gander is enough, but even mated is better still. You will get more goslings according to your stock. If you keep more than one gander, keep them separate with their mates while they are laying. It appears that water is their element, but they fat and grow faster away from streams and ponds, but they must have a supply of pure water to drink and to sport and play in. They must have a place to go under, even in a shower, if not they will be as wet as a hen. They can be fatted for market in about 60 days by giving them all they want to eat of corn and corn-meal, and a few pork scraps, chopped fine and soaked and mixed with their meal. About three weeks before dressing for market, shut them up in a yard allowing each goose six feet square so as to let them flap their wings and to stir round. Plucking geese while alive should be done twice a year; first, in the spring, when they shed their quills, then in the fall. SILAS DENHAM.

South Hanson, 1860.

LADIES' DEPARTMENT.

HOW TO MAKE GOOD COFFEE.—Although coffee is a beverage in daily use in almost every family, there are comparatively few who appear to know how to make a really good cup of it. Generally, the first thing Biddy does in the morning is to make the coffee, no matter if it is an hour before the other portion of the breakfast will be ready. During the whole of this time it is kept boiling furiously, and the house is filled with its fragrance. This fragrance is very agreeable, but, unfortunately, when you have it, you gratify your olfactories at the expense of your palate; for I am perfectly satisfied that this over-boiling produces that acrid bitter taste so often found in coffee. My plan is to leave the making of the coffee until the last moment. Having the boiling water ready, and my ground coffee properly mixed and cleared, I pour the boiling water over the coffee, and then allow it to *boil one-half of a minute*. Try it, if you doubt the correctness of my method.

KITCHEN FURNITURE---SINK AND UTENSILS.

Never have dark furniture for a kitchen. It shows the dust much more than light, and requires double the care. Never have extra shelves, mantels, etc., pointed dark, if you can prevent it. If it is your misfortune to have dark paint and furniture, wipe it once in a few days with a damp dusting cloth, and have it varnished often.

Have your sink in a convenient place, but never under a window, if you can avoid it, as much work is caused by greasy dishwater spattering upon the window, as it necessarily must. Back of your sink nail up a piece of paper, pretty if you choose, and have it nicely varnished, and then you can, with a wet cloth, remove all the spots that would soon spoil the room-paper. If you are so fortunate as to have a sink-room, have it papered and then varnished well all over, as fly-tracks and every spot can be wiped off. The sink should be lined with zinc, nailed only around the edges, as nails upon the bottom rust and wear through, allowing water to run under the zinc, thereby causing the boards to rot.

Good zinc can be kept nice and bright, by scouring once in a week or two with sand, and rubbing all over once or twice a day with soft soap, scalding and wiping dry.

At one side have a shelf to keep your water-pail on, which always, day and night, keep covered; an uncovered water-pail is a slack thing. Nailed upon the back side of the sink, have a little box, perforated through the bottom, to keep hard soap in, and, if you have no better place, your Castile soap also, and a piece of pumice-stone, to remove stains from your hands. Your soft soap keep under the sink, which I take for granted is boarded up, with a door, where you put your pots and kettles, board to scour knives upon, sand, etc., and which place should be kept as neat as your sitting-room. Just over the sink have a narrow shelf, with holes through it, to set your common tumblers upon, when washed and rinsed, that they may drain and dry; thus saving the time and labor of wiping them all with a dry cloth.

At the other end of the sink have a narrow strip nailed up, to set your kettle-cricket on; of these, you should have two, one to set your kettles on, when washing and cleaning them, and which should be kept under the sink, in some odd nook; the other should be smaller, and only be used to set the tea kettle, etc., on when filling, and therefore must be kept handy and clean; so if you should be sick with the headache, pain in your side, or any little trifling thing, and should ask your kind husband to fill the tea-kettle, he would take the cricket down to set it on, instead of setting it in the sink—thus causing you more labor than he saves; which he would be sure to do, were the cricket under the sink, or so black and nasty, he could not touch it without soiling his hands.

And last but not least, have a light rack made, of strips of wood an inch wide, an eighth of an inch thick, and a foot long, nailed over one another, making your rack a foot square, with both sides alike, to put in your sink to turn dishes upon while washing; thus keeping them from touching the sink; which is liable to be greasy and dirty, and draining them so they will wipe easily.

You may think, fair reader, that it takes considerable to furnish a sink to suit my taste; but every one of these things are around my sink, and not one would I dispense with, neither will you, after having once seen how convenient they are.—Sarah B. Sawyer, *in Ohio Cultivator.*

DOMESTIC RECEIPTS.

Rich Rice Pudding.—Pick and wash a quarter of a pound of rice; put it on in cold water, and let it boil five minutes, then strain the water off and put the rice on in as much new milk as it will require to boil it quite soft, with a good pinch of salt; stir it frequently to prevent it burning; when done, put it into a large basin to cool. Beat up six eggs, a pint of milk and sugar to your taste; it should be rather too sweet when you make it, as the sweetness goes off in the baking; add also five or six bitter almonds blanched and crushed, with plenty of lemon peel chopped very fine; mix all well together, then stir it into the rice, taking care to mix it thoroughly, so that there be no lumps. Butter your dish and pour in your mixture; then shred about two ounces of beef suet as finely as possible all over the top; grate over that half a nutmeg, and bake it half an hour in a moderate oven.

Potted Beef.—The coarser, tougher parts of beef, as the neck-piece, etc., which usually sell quite cheap, may, by a little cook-science, be made palatable and even delicious. We have tried the following and can recommend it. Boil the meat until tender, chop it fine, and pound it with a pestle until the fibres are well separated. Salt and pepper it to the taste, and add cloves, allspice, or cinnamon, as may be desirable, also a little sugar. The quantity depends upon the cook's palate. Pack it tightly in earthen jars or bowls, and pour over it a thin layer of melted butter. It will keep a long time. When cold, slice it very thin and eat cold with bread and butter. It makes a nice relish for lunch or tea.

Mince Pie without Meat.—Chop three pounds of suet very fine, and three pounds of apples, (cored and pared,) wash and dry three pounds of currants, stone and chop one pound of jar raisins, beat and sift one pound of loaf sugar, cut twelve ounces of candied orange peel very fine, and six ounces of citron; mix all well together with a quarter of an ounce of nutmeg, half a quarter of an ounce of cinnamon, six or eight cloves, and half a pint of French brandy; cover it close, and keep it for use.

Fruit Cake without Eggs.—One cup of molasses, one cup of brown sugar, one cup of butter, heat together sufficiently to melt the butter, two teaspoonfuls of cloves, two of cinnamon, one of nutmeg, one coffeecupful of raisins, (with or without currants,) citron; then add one teaspoonful of soda dissolved in hot water; one cup of sour milk or buttermilk, and one quart of flour; bake one hour.

To Save Frozen House Plants.—When plants are found to have been frozen during the night, they should not be removed to a warm place, but on the contrary, they should be dipped in cold water, and set in some cool place where they will not freeze, and also in the dark. They will then have a chance to recover, if not completely dead.